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ORIGINAL ARTICLES.

PHYSIOLOGICAL DIETETICS.

BY ALFRED K. HILLS.

FIFTH ARTICLE.

CLINICAL.

Acute Gastritis.—A regulated diet is sufficient in most cases. When serious, action of the stomach should be suspended entirely for a while, causing the patient to fast several days, or to receive nourishment by the rectum. If this is not necessary, and it is never pleasant to the patient, a plain, easily digestible diet may be prescribed, such as barley water, a couple of soft boiled eggs, beef tea, and the like. *An ulcerated surface will not be prevented from healing unless it is kept irritated by external causes.* Therefore, no solid food; the prospect of success will be more encouraging if we endeavor to prevent, as far as possible, a long-continued collection of acids in the stomach.

The possibility of relieving the stomach, temporarily, of its irritating ingesta, naturally suggests the desirability of maintaining the beneficial effects of keeping the ulcer free from the corroding action of the gastric juice for as long a time as possible. The object is accomplished most readily by allowing the stomach entire rest for a considerable time. The entire feasibility of such a plan is shown by the fact, demonstrated both by physiological experiment and by clinical trials, that a considerable quantity of nitrogen can be introduced into the body by means of the meat pancreas injections (Leube's), and that a person can be nourished in this way, per rectum, for a long time without suffering any sensation of hunger. This annoying mode is very generally unnecessary. The same results are obtained by using the meat solution devised by Leube-Rosenthal. After from two to three weeks the patient may be placed upon a light diet, consisting of pigeon, chicken, purée of potatoes, thicker soups, wheat bread, etc.; and after eight days gradually return to coarser food. Since adhering strictly to this method I have never found it necessary to resort to any other remedies. Even after the ulcer has entirely healed, the diet is to be carefully regulated, so as to avoid taxing the powers of the stomach—to be kept upon a light, easily digestible

diet for some time after the beginning of convalescence. For fear of relapses, caution in the use of food is imperative even after complete recovery.

Chronic Gastritis.—The most important indication, after due preparation of the gastric membrane for recovery, is to preserve it from the irritation which might interfere with the cure. This is only perfectly fulfilled by absolutely no food. In severe cases, nourishment only by the rectum. In milder cases, an easily digestible diet is sufficient. Foods composed largely of carbohydrates, are only to be permitted sparingly in diseases of the stomach. They are as follows: A little white bread, biscuit, rusk; among vegetables, the most tender, such as asparagus, young hops, hulled sweet peas, young carrots, potato soup, in any case but sparingly eaten. In chronic gastric catarrh, *fats* are not permissible. Eggs, when soft boiled; meat should, in general, not be prepared when too fresh. Among the most digestible, the white meat of fowls, the glandular organs of young animals, the flesh of young pigeons, the thymus gland of the calf, etc. Fish, also, when boiled and free from fat, is easy of digestion—at least, Beaumont's experiments upon St. Martin show fish to be the most digestible of all meats. Boiled veal may be allowed in some cases. Beef, only when roasted rare. Meat, like all other food, should be chewed into small pieces before swallowing, and no greasy sauce with it. Milk, generally, is easily digestible, but it sometimes ferments rapidly; therefore, we are occasionally compelled to use Leube-Rosenthal's beef solution; this is even more easy of digestion than the normal food, because previously freshly digested artificially outside. In a small number of cases, particularly of atony of the mucous gastric membrane, easily digestible nourishment is, on the contrary, rather hurtful. To prevent fermentation in such cases, we must confine the patient to a meat diet. It is unnecessary, however, to be so particular respecting the especial sort of food, as in the other varieties. When, in this form of the disease, the patient who suffers from insufficient secretion of gastric juice has accustomed himself to the habitual use of sharp spices and similar gastric stimulants, these are to be withdrawn very gradually, or replaced by harmless substances calculated to induce a freer secretion on the part of the mucous membrane. Among these latter may be mentioned cold water, ice, alkalies, in the form of mineral water, or the so-called

bitters. Wine, of some kind, mingled with water, is perhaps the best beverage, though, perhaps, better to abstain entirely from alcoholics. Where wine is imperatively demanded, it may be administered per rectum. Light beer, or large quantities of acid wine, is highly reprehensible. In case of intense thirst, small morsels of ice tend to allay it, and also to excite secretion of gastric juice.

Cancer of Stomach.—The object of regulating the diet is to control the vomiting, to alleviate the pain so far as it is due to an excessive irritation of the sensitive wall of the stomach by indigestible or fermenting food, and to check the cachexia by proper nourishment. Oppolzer calls particular attention to the fact that in many cases only cold food should be allowed, as warm food excites vomiting. Beef solution is deserving of a fair trial; still, the inclinations of the patient are to be consulted; no fixed bill of fare should be forced upon him. If this is ineffectual, it will be well to give the stomach complete rest for a time, by the employment of nourishing injections, especially of meat and pancreas—a plan which is, moreover, absolutely indicated in cases of marked stenosis of the cardia. When vomiting and pain have been thus relieved, the use of easily digestible food by the mouth may be resumed; still, it is advisable, as a rule, to give only very small quantities at a time, and, above all, in a fluid form. In conditions of collapse recourse must be had to the usual stimulants, particularly strong wine, the use of which should, in general, not be denied the patient during the whole course of the disease.

*Dilatation of Stomach.**—Careful regulation of diet is absolutely necessary in this affection. Especially the quantity of food and drink must be limited, while in general the diet must be of an easily digestible character, so as to avoid any distension of the organ. To promote the secretion of the gastric juice and thus increase the powers of digestion, trial may be made of cracked ice, either alone* or in combination with milk, as in Petriques' ice milk treatment.

Small quantities of liquid food at frequent intervals is generally best, carefully excluding all starch and sugar. Gluten bread, the white of egg and digested cod-liver oil, is an excellent diet when it is borne by the patient. Hydroleine did me the greatest service in a case of this kind.

Intestinal Catarrh.—The selection of the suitable diet is the most important part of the treatment. The chemical and mechanical irritation which the chyme and the more solid faeces normally excite in the healthy mucous membrane may act abnormally when the mucous membrane is inflamed. All food, therefore, which is difficult of digestion, and the mechan-

ically irritating portions of which must, of course, pass into the large intestine still undigested, such as leguminous vegetables, cheese in large pieces, cabbage, stringy meat, etc., must be strictly avoided; so also, but little bread should be allowed, because, as Voit's experiments have shown, a bread diet increases the solidity of the faeces. In general, the best diet for patients with intestinal catarrh will consist of albuminous substances of an easily digestible character, such as milk, yolk of egg, meat solution, food and broths containing but little starch, and especially the various kinds of mucilaginous substances, such as barley water, groats, etc. Fatty food is also to be forbidden.

Typhoid Fever.—It is a matter of the greatest consequence that patients be properly nourished, otherwise the prostration may be too great for the powers of reaction; on the other hand, the feeding method has been carried to an extreme, as, for instance, when it has been attempted to feed the patients with large quantities of meat. Water is the one article which a patient needs most, and of which he should partake as freely as when in health. In addition to the amount of water which, when well, we imbibe in the form of various drinks, a considerable quantity is introduced in our solid food. Even patients who seem tolerably conscious usually fail to partake of the necessary amount of fluid, unless reminded thereof. One should, therefore, when they are not actually asleep, put the glass or the spoon to their lips every quarter or half an hour. It should not be urged upon them; they should never be allowed to take much at a time. As to the kind of beverage, it should be left a good deal to choice, and it is well enough to change it frequently. Simple cold water, with or without ice, seltzer, or other similar mineral waters, wine and water, lemonade, tartaric acid, or mineral acids in water, with or without sugar, thin milk of almonds, a thin decoction of parched rice, especially where there is a good deal of diarrhoea, thin barley water, milk and water, etc. Protein compounds in any large quantity should be interdicted. It is better to fall back upon the old fever diet generally composed of carbohydrates. Mucilaginous barley water, thin oatmeal or grainlet gruel, and the like, combined with not very strong meat broth, or beef peptones, constitute about the most desirable diet. According to Stromeyer, oaten grits, cooked for three hours, is the best thing to give to typhoid fever patients. Milk will suit many cases, and should be boiled and reduced with water, seltzer water, tea, coffee, and the like; and the further advanced the disease, the oftener may the yolk of an egg be beaten up with the meat broth or barley water. A good deal of persuasion is often necessary to induce patients to take the requisite amount of nourishment. In those quite low,

* Ergot is the best medicine I know of in this affection.

concentrated beef tea, prepared by long boiling of the meat in a close-stoppered bottle, or Liebig's beef tea, prepared by macerating the meat with hydrochloric acid, both of these being improved by mixing with claret wine. Also such cases might be benefited by the Leube-Rosenthal beef solution or the meat and pancreas injections. Wine and liquors are admissible at any stage of the disease, even during the height of fever; still, it is best to be governed in their use by the former habits of the patient, as well as by his present condition. Extract of meat is thought to increase diarrhœa. No objection to it in small quantities as a flavor, but it is not a nutritive substance. Salt food, especially meat and bread, should be reserved for advanced convalescence, and even then the possibility of perforating the bowels, or of a relapse, being caused by errors of diet, should be borne in mind.

Physiological considerations, which he sets forth in a recent paper, have led Dr. Allechin, of London, to question whether the assumption that fats and carbohydrates ought to be diminished in the diet of fever, in favor of nitrogenous food, is sound. He is inclined to agree with the opinion of Dr. Parkes that a considerable diminution in the customary quantity of nitrogenous food, and an increase in the quantity of fats, is advisable; he has advocated the use of cod-liver oil and butter where they could be borne, and an increase in the quantity of amyloid food. The partially digested proteid and amyloid food now available affords physicians facilities not at their disposal half a century ago.

A correspondent of the *Medical World* thinks that milk will be found as valuable a diet in fevers of all kinds, eruptive and non-eruptive, as in small-pox. "It will never disappoint you as a food when the patient has not an idiosyncrasy against it. It scores two points which are very important: First, a nutritious and easily assimilated food. Second, it produces a favorable action of the kidneys, especially in scarlet fever. If I could not have but one in scarlatina, milk or medicine, I would choose the milk."

Cholera.—The greatest caution is always to be exercised as regards the nutrition of cholera patients. If the temperature continues to rise, a small (later a large) spoonful of beef soup or of beef peptonoids may be given every three to four hours. When the reaction has become established, tea or coffee with equal parts of milk may be given several times a day. But the greatest care must be taken to proceed gradually and with the closest supervision to an increased and more solid diet. This should be of animal food, simply prepared, and it should not be allowed at all until the tongue has cleaned off and all intestinal catarrh has ceased. Indigestion is as fatal in the convalescence of cholera as in typhoid fever. An in-

creasingly liberal diet may only be commenced when the digestive organs have become perfectly normal, and must then be continued under constant observation.

Enemata of Rudisch's sarco-peptones or of Reed & Carnrick's beef peptonoids, ought to prove excellent adjuvants in the treatment of this much-dreaded malady.

That you may know how to visit with safety cholera patients, and to live among them, Hugo Engel thus tells us what the King of Italy did. While the disease was at its height in Naples, he arrived from Rome and visited the cholera hospitals in that city. He escaped uninfected; but why? All his food, and all the water and wine he drank, were sent to him from Rome in sealed and hermetically closed bottles and boxes. As he could not become infected by way of inhalation, but only by the food and water swallowed, care was simply taken to have the food and drink pure, free from comma-bacilli. Should the cholera visit us, have your main organ of digestion in the best possible order, avoid errors of diet, live on the plainest food, and have every drop of water you drink, every particle of food you take, thoroughly boiled, and you will escape all danger from infection. And if, notwithstanding these precautions, living comma-bacilli reach your intestines, and indicate their presence by the first symptom of the mildest diarrhœa, at once have recourse to your physician, and putting yourselves under his care, minutely follow his directions, and the once-dreaded disease will soon become a matter of little concern to you personally.

Sporadic Cholera.—At the beginning of a severe gastro-intestinal catarrh, the patient, particularly if a child, should be *entirely* deprived of food, while thirst may be appeased with pellets of ice, and in infants with water previously boiled. If absolute fasting is not without danger, patient should be confined to oatmeal gruel, oatmeal boiled down to a mucilage and strained, which may be given from a nursing bottle. Adults should be confined to soups alone. After the acute severity of the attack has passed, the greatest caution should be observed in returning to the ordinary diet. Food should be given at first only in small quantities and at suitable intervals. Beef essence is most suitable for adults, with soft boiled eggs, broth, etc., as in chronic gastric catarrh.

Mother's milk, in normal quality, is the nourishment most appropriate to the infant organism. Next the various foods referred to in our former article, are to be recommended, according to conditions and circumstances. It is not advisable to give meat to infants under a year old, in any form, nor eggs. Pap made of dry rusks, meat broths, and all those nourishing foods which, with the best intentions, but without consideration of the limits of the infantile

digestive powers, are forced upon the child suffering from gastro-enteritis, occasionally with the gravest consequences.

Dysentery.—The diet must be regulated mainly according to the state of the stomach and upper part of the intestine. There are cases in which the digestive power of the upper bowel is pretty well retained, and where even the appetite is not much diminished; in such cases, in view of the active wasting of the body from loss of blood or fluids, and by pain, mild articles of food may be given safely even during the disease. Milk (condensed), strong soups, egg with water, the yolks of eggs, and pure beef juice (uncooked), beef peptonoids or Leube's beef solution. All hard substances which form a large quantity of feces (meat, vegetables, potatoes, etc.) must be strictly avoided. Drinks should be lukewarm, because cold liquids always bring on painful contractions in the transverse colon. Spirituous drinks should be entirely avoided. In cases of lack of appetite, vomiting, etc., a prescribed diet must be rigidly adhered to. The best way is to drink barley water, thin oatmeal, gluten or grainlet gruel, Sydenham's decoction or almond emulsion, lukewarm, and to these may be added, with advantage, a small amount of bitartrate of potash (30 grs. to a pint of fluid) as a cooling and gently aperient medicine (according to the advice of Zimmermann). During convalescence, the diet is to be most carefully watched. When the patient begins on solid food, he should take only the white meat of fowls and delicate fish. As in prophylaxis, articles of food causing flatulency and constipation are to be avoided, especially those containing a large amount of starch, as potatoes. Milk should be avoided when causing constipation. All things are forbidden which irritate the mucous membrane of the bowels—half-ripe fruits, salads abounding in cellulose, strong spices, greasy fried food, etc., are strictly to be avoided. The dietetic treatment alone is sufficient in many cases of dysentery, where the affection is limited to the rectum and neighboring parts of the sigmoid flexure, and is of a seropurulent nature.

THE RATIONAL TREATMENT OF CHOLERA.—The treatment (according to the *Jour. of Neurology and Psychiatry*, May, 1884) consists in putting the patient to bed, putting the muscles in the best position for rest and avoidance of those sources of irritation which would cause them to contract and produce that condition which it is desired to cure. Massage is to be thoroughly used three times a day. Massage will quiet the restlessness which comes on in the afternoon, sooner and more permanently than any other means. All unnecessary talking is to be avoided. Diet to be abundant and nourishing. The usual remedies can be given in addition, the patient being in the best possible condition to be favorably affected by them. The confinement to bed seldom extends over a month.

PRIMARY LIFE.

BY ROLLIN R. GREGG, M. D., BUFFALO, N. Y.

PRIMARY LIFE exists in fibrin; and this life is perpetual, or, more properly, it is a perpetual principle of fibrin. That is to say, the earliest manifestations of life in material form are found in fibrin; and it comes back to life, out of death, over and over again, under every proper opportunity that is given it.

This primary life is neither shown nor possessed by matter of any other kind. Fibrin is the only form of matter in all nature that organizes of itself, apart from other life; and this does, as we see in the clotting of drawn blood. As the blood circulates in us, its fibrin exists in fluid or semi-fluid form, but when drawn, it (the fibrin) immediately begins to coagulate into granules, which next unite into rods, and these into threads to coagulate the whole mass—these threads forming in enormous numbers and running in every direction through the mass, changing what was a fluid into a solid in a few minutes; and this formation of the threads of fibrin is an act of organization.

This organization of fibrin in drawn blood, and after separation from other life, is due to the fact of its being possessed of primary life which asserts itself, not only in the organization of threads in the clotting of blood, but also in showing active, moving life, under other circumstances, as will be shown further on. Every kind of matter has its special attributes, and this principle of life appears to be the special attribute of fibrin.

When stirred out of fresh warm blood and thoroughly washed, until the blood corpuscles and other elements still clinging to it are removed, fibrin is seen by the microscope to consist mostly of separate threads, but much of it also is in cords and ropes made of threads twisted and bound together.

Place such a mass of fibrin in water to rot and within a few days the threads of which it is composed begin to break up into sections, or rods, of various lengths, which soon after show active life and move about apparently of their own will. These rods, under continued rotting, break up in a few days more, into granules, as they were at the beginning of the clotting of blood, or of their organization into threads, and these granules also show active life and the power of moving at will.

It requires about two weeks for the threads and rods of fibrin to break up quite fully into granules under rotting in water at ordinary temperatures. Then these living, moving granules begin again to organize into rods of considerable length, with the same powers of motion as the similar ones had before

them, until they next mat together into a net-work, when, of course, all motion in them stops. This process also takes about two weeks, then the net-work breaks up and back into rods and granules again, all showing life as before, and requiring another two weeks for this part of the work. At the end of this time the granules, still alive, organize into rods also showing life again, and these rods soon develop a net-work of a somewhat different appearance from the preceding, and continue in that until it is broken up again in about the same length of time. After that the fibrin appears to lose its activity and becomes dormant—at least, I have followed up the observations two or three weeks longer and found nothing special to record.

But let the water dry out and leave it dry for a time, then add more water, and it will go through the same process again in periods of two weeks. It will do this over and over again—that is, come back to life every such opportunity that is given it; and, of course, it does all this as well as organizes the threads to clot blood, because it is possessed of life in and of itself that never dies. Indeed, this life in fibrin cannot be destroyed. Boiling it, however long, does not destroy it. Baking it for hours and then burning it to a charred, blackened mass does not destroy it.

Two years ago I boiled a mass of fibrin much of the time for ten days, then put it into distilled water to rot, and the rods and granules of it came back to life and went through all the processes above detailed, just as does fresh unboiled fibrin. That specimen was kept supplied with water all through that summer, fall and winter, was frozen solid most of the winter, then left to dry down to a crumbling, brittle crust at the bottom of the cup, and left in that condition the following summer. The succeeding fall distilled water was added, and it went through all the processes of life and organization after that as in the first instance. I also baked a part of the same mass three hours, just after first boiled, then charred it black all through, triturated that many hours, put some of it in water to rot, and its granules came to life and active motion the same as the rest. So it will be seen that this primary life of fibrin is indestructible and perpetual.

If other matter in solution, or in a finely divided state, be furnished to fibrin when rotting in water, it will then go on, take up this other matter, if it is appropriate, and build up other life next above itself. To illustrate, add sufficient water to blood to keep it fluid and leave that to rot, the fibrin therein will all first break down into rods and granules showing life, just as is the case with pure fibrin; then the granules will organize into rods and threads, and these into net-work, the same here also as when only fibrin

is used. But after that, this net-work, or the fibrin of which it is made, appears to draw the other matter of the decomposing blood into its meshes, and there organizes it into cells, or a life of a higher order than the fibrin itself possesses, or can produce alone. Here the work goes on likewise in periods of weeks as in other instances, and much longer than fibrin alone can work. I once followed it nine or ten weeks in successive changes, but how much longer it continues its operations without the addition of other, or fresh matter, I know not.

Sometimes fibrin forms in masses resembling india rubber, and then it seems to show a remarkable concentration of the powers of life, or of organization. I have one specimen taken from blood while boiling and put upon a hot slide and left to cool. On this there is an india-rubber-like mass, and, from under it, extends out one of the most beautiful specimens of anastomosing vessels that I ever saw. It resembles the anastomosing vessels of the mesentery more closely than anything else. I have seen several such appearances, in different specimens, so it would appear not to be accidental.

It would seem that it cannot be until after fibrin has built up an order of life next above itself, that nuclei and germs of species of that order are or can be produced, which may then go on through evolution to higher and higher organizations up to the highest. If all this be true, then fibrin is or was the original progenitor, or beginner, of all the varieties of life now upon the earth, both vegetable and animal.

Fibrin is the connecting link between vegetable and animal life. It is the matrix of all life. It exists in the juices of all vegetables as it does in the blood and other fluids of all animals, but in less quantity in the former than in the latter. It is primarily present in all life; and, indeed, before life begins, excepting the primary life of which it is itself possessed.

Were I to offer a conjecture in this connection, it would be that direction may have been given to life, or its line of evolution fixed in each instance, by the environment in which fibrin was placed when starting any form of life, and by the food, or the materials in solution or in a finely divided state, that it appropriated, or had to work with. For instance, it would seem that life thus developed in salt water, or at its borders, would be given a different direction and line of evolution from that developed in fresh water, and so on of minor differences. I have seen some things that would seem to warrant this conclusion; but, nevertheless, this is given as conjecture and not as fact, until ample investigation is had to show that it is fact. Furthermore, unless I am mistaken, one of the richest fields for scientists to work

in the future will be to feed fibrin, in water, with different forms of organic matter, earths and minerals in various proportions, and watch the different lines of development that the lower orders of life thus started seem to take or are given. Certain it is that they will see fibrin come back to life every such opportunity they give it, and establish some very interesting and remarkable operations. It would also be a curious and perhaps important study, to see what effect different drugs in varying quantities would have in influencing the direction of the life that fibrin develops.

Thus faith, after all its long and weary waiting, receives its first evidence from physical observations to sustain its hope in the immortality of life—providing, of course, that the most thorough investigations shall show this to be truthful evidence. But as the expression “immortality of life” is so universally understood as only applying to the immortality of the soul, and as it is best at the threshold of all subjects to avoid language that is misleading, the foregoing facts better be called evidence of the perpetuity of life on earth. Then if we have the proof made secure of this lowest life living after death, or coming back to life perpetually under every favoring opportunity, it may certainly be construed as the strongest presumptive evidence, and the first step in the proof that must certainly come in its own good time, that the infinitely higher life, the soul, must be immortal as well.

Atheists have always told us that man was not immortal, that there was no resurrection for him; and, through their increasing numbers, under the lead of Tyndall, as well as from there being no one who could positively prove them wrong, they have grown much bolder, of late years in these assertions. Whereas, the truth is, the resurrection of life has been going on constantly through all the centuries, even in their very door-yards, and they knew it not. To illustrate, every kitchen drain, every cesspool and every sewer, well supplied with air, warmth and water (to say nothing of the millions of other instances), have been daily teeming with resurrected life—of the lowest order, it is true, and only for the purposes of this world, but it is *resurrected life* nevertheless.

Such, then, being the facts about the very lowest order of life, the revilers of that faith and hope in immortal life, which is the central sun of man's inner spirit, outshining all else, must not tell us any longer, themselves having not the slightest proof to back their assertions, that there is no resurrection, no immortality, no future conscious state, for that combination of intellectual and moral force in man, which is far higher than all else in life, and which

makes him but little lower than the angels and well worthy of the God that made him.

I have taken occasion to investigate, and found that the waste water of all cooking, especially of animal food, is more or less loaded with fibrin, while all scraps of meat, bread, etc., are full of it; all of which, of course, comes back to life whenever the chance is given it. Thus it is that the simplest and most common things in nature, when the truth is once learned in regard to them, overturn all the false logic and false wisdom that error has been centuries in building.

By the facts presented it will be seen furthermore, that the bacteria theory and the controversies over it become of very minor importance; are, indeed, but a single wave, or more truthfully speaking, perhaps, a small group of waves, on the great sea of vegetable and animal life, of sufficient volume and force, nevertheless, to have carried thought on a voyage of discovery to the other shore.

In conclusion, the study of life and its order of development must ever continue to be one of the most intensely interesting and important that engages the attention of men; and it is hoped that the foregoing facts may assist future generations, to some extent at least, in this study—even if the present generation, through prejudice, misrepresentation and other bad motives, shall be debarred of aid from this source.

MEDICAL EDUCATION AND MEDICAL LICENSURE.*

BY REGENT WILLIAM H. WATSON, M. D.

THAT it is of the utmost importance, both to the public and to the profession itself, that the medical profession should maintain a high standard of education, will not, I think, be disputed by any educated man. So intimate are the relations of this profession to all grades of society, and so closely is it intertwined with every kind of interest, not only of the individual man, but also of the aggregate masses of mankind, that the welfare of society is advanced by its prosperity, and nothing which affects its well being can be devoid of importance to the community.

No man lives for himself alone, and the advantages of knowledge can never be confined to their immediate possessor. If this is true of men in general, with how much greater force is it applicable to the physician! Every hamlet has its physician who is brought into daily and most familiar intercourse with every individual, as well as with every family, in it. As the calling of the physician brings him into more intimate and direct contact with all classes and conditions of men than the members of any other profession, and under circumstances which render his

*An address delivered at Albany, before the University Convocation of 1885.

influence most powerful for good or evil, so do the attainments of physicians make their power felt, while their deficiencies are noticed throughout a whole community more completely than those of any other profession. If we were to consider physicians merely as men engaged in the common avocations of life, their education, therefore, should not and could not properly be a matter of indifference to the communities in which they live.

The physicians of a community cannot, however, be regarded simply as men engaged in the ordinary affairs of life, and their connections with society is not of the same character as that of others of its well or poorly educated members. They pursue their calling under circumstances before which all the distinctions of rank, of wealth, and even of intellect are leveled to the dust. As disease acknowledges no privileged example, but in the beautiful words of the Latin poet :

"Pallida Mors aequo pulsat pede
Pauperum tabernas, regumque turres,"

neither does medicine admit the distinctions of pride and place in dispensing its favors. The poor and the rich, the king and the peasant are equally the recipients of its benefits.

A high standard of medical education is most important to the medical profession itself and hence, though less directly, to the people of the State. In its intellectual range the profession is bounded only by the limits of the mind itself. It calls into exercise every faculty of our nature, and requires all the aptitude and strength which they derive from culture. The study of medicine is the study of man, both as a sentient and thinking being, and of the numerous and infinitely diversified agents by which he is surrounded. It embraces a view of nature, human and general, and invokes the assistance of both physics and morals. Its scientific scope has probably been more fully described by Sir James Paget in his address from the Presidential chair of the International Medical Congress of 1881, than by any other writer. "It is not only," he said, "that the pure science of human life may match with the largest of the natural sciences in the complexity of its subject matter, not only that the living human body is in both its material and its indwelling forces the most complex thing yet known, but that in our practical duties this most complex thing is presented to us in an almost infinite multiformity. For in practice we are occupied not with a type or pattern of human nature, but with all its varieties, in all classes of men, of every age and every occupation, in all climates and in all social states; we have to study men singly and in multitudes, in poverty and in wealth, in wise and unwise living, in health and in all the varieties of

disease, and we have to learn or at least try to learn the results of all these conditions of life, while in successive generations and in the mingling of families they are heaped together confused and always changing. In every one of all these conditions man, in mind and body, must be studied by us; and every one of them offers some different problem for inquiry and solution. Wherever our duty or our scientific curiosity or in happy combination, both, may lead us, there are the material and there the opportunities for separate, original research."

The standard of medical education is confessedly so low, both in the abstract and in comparison with the other learned professions, that there has risen, both within and without the profession, an urgent demand for a more thorough preparation than now exists in this State or country. The degree of doctor of medicine now possesses little value, as a certificate of proper qualification for the duties of the profession, for the reason that there is no standard of qualification, except that which each of the 123 medical colleges in the United States (12 of which are in our own State) may choose to adopt. In only about 60 per cent. of these is there any examination required, preliminary to the study of medicine, and in most of the cases, where any examination is required, it is of the most elementary kind.

That it is admitted by all that the standard of medical education is very low may be shown by a few quotations of the highest authority. Says our honored Chancellor, at p. 40 of the 97th report of the Regents of the University of the State of New York: "A strong sentiment in favor of a better preliminary preparation for the practice of medicine is exhibited. We regret, yet feel bound to say, that no class of professional men, entering upon professional life, with degrees conferred upon them by authority of law, by institutions duly organized and chartered by law, are so ill-prepared in all fundamental knowledge and in those preliminary studies which form the basis of educated men, as are those of the medical profession. Yet no profession demands so much careful judgment, such keen sagacity, such wise discretion, such prudence and skill in judgment, such maturity and broad learning as those who practice the various departments of medicine and surgery."

Says President Eliot, of Harvard University, in his report for 1879-1880: "An American physician or surgeon may be, and often is, a coarse and uncultivated person, devoid of intellectual interests outside of his calling, and quite unable to either speak or write his mother tongue with accuracy. What wonder, if, under these circumstances, the degree of Doctor of Medicine has not heretofore been universally accepted as a passport to refined society?"

How is the evil to be remedied?

1. By a better preliminary training of candidates for the profession.

2. By separating the teaching from the licensing interests.

In an address which I delivered in this city on February 28, 1861, I urged upon the profession that every physician should understand Latin, moral, intellectual and natural philosophy, chemistry, the mathematics and all the English branches, and stated that it was very desirable for him to superadd to these a knowledge of French and German, and also expressed the desire that the study of medicine should be extended through four years instead of three. During the quarter of a century which has elapsed since that time, I have had abundant opportunity to see the importance of the preliminary education then suggested.

No man can fully comprehend the technics of the profession, who has not a knowledge of Latin at least, and he should have some acquaintance with Greek. How useful French and German now are to the physician every person before me can readily understand, and to the coming physician they will be absolutely indispensable to enable him to fully keep up with the progress of medical science.

I would here enter another plea for the study of language by the medical student, and especially of the Latin and Greek. I confine my remarks chiefly to these two, because they are, to a great extent, the parent of most of the modern languages, and we derive from their study the same benefits, though in a far greater degree, than from the study of any of the modern languages, unless I except the German. The study of the classics, while on the one hand eminently conducive to the habit of disciplined thought, involves from its very commencement to its close, the nicest analysis, the most delicate perception of different shades of meaning, and the most constant collocation of words. The student, in order to select those words which most exactly express the meaning of the author, must enter into a patient comparison of synonymous terms, must carefully weigh the evidence on either side, and must balance shades of thought, which, to those unaccustomed to those pursuits, seem to be almost imperceptible. By such processes as these the mind acquires not only the ability to recognize the slightest varieties in thought and speech, but the power, which to the physician is worth more than any other, since upon it depends all his subsequent procedures in the treatment of disease—the facility akin to a quick and unerring instinct—of differentiating similar cases of disease—in a word, the power of diagnosis. The judgment thus tends to become like the scale, capable of weighing the smallest

particles, and of detecting their slightest variations. From this power comes the power of prognosis.

The importance of a correct diagnosis, both to the reputation of the physician and to the welfare of the patient, cannot be overrated. More than thirty years of active professional life have only served to confirm the truth of the saying of the distinguished Louis: "*Sans un diagnostic exact et précis la théorie est presque toujours en défaut et la pratique souvent infidèle.*" Says the most distinguished oculist of our day, Dr. Herman Knapp, of New York: "Weakness in diagnosis does more harm than all other shortcomings together. Without a correct diagnosis a trustworthy prognosis and a judicious management of a case are impossible."

The power of distinguishing diseases lies at the root of all correct and enlightened practice and without it all medical action is empirical and fortuitous. In any community he is always the best physician who, in comparison with his colleagues, most thoroughly understands the art of diagnosis. In my judgment no preliminary study will so powerfully contribute to develop those qualities of mind upon which depend the power of rapid and accurate diagnosis as the study of languages, and especially the languages of Greece and Rome.

No argument can be necessary to prove the importance of a knowledge of chemistry, physics, and the English branches. We come then to the question of the importance of a preliminary study of the mathematics. Every one who has studied the pure mathematics in a thorough and systematic manner, must certainly acknowledge that their influence in disciplining his mental powers is by no means small. The study of geometry and of algebra—when pursued in such a manner that all the relations between the different processes are thoroughly understood, gives to the mind a habit of attention and of strict analysis, and secures to it a power of tracing the relations between causes and their effects, that can be attained to an equal extent by the pursuit of no other branch of education. The mind accustoms itself to a nice and accurate observation of the distinct and subordinate parts which make up the whole subject, as well as to an exact view of the manner in which they all harmoniously conspire towards the same end. The power thus acquired by a series of efforts in one particular department of inquiry, is employed with admirable effect in other pursuits. The mind brings to its reasonings on other subjects, all that arrangement and consequent clearness of ideas which it has so carefully employed in mathematical investigation.

2. There must be an entire separation of the teaching from the licensing interest.

Beyond all question, the intent of the laws now in force in this State relative to the medical profession

is to maintain such a grade of qualification as shall ensure the attainment of that sound medical education which is essential to all physicians. That they fail in accomplishing their purpose cannot be denied. The reason of this failure is very obvious. The State, in the case of the medical practitioner, waives its own just and proper prerogative of deciding upon the qualifications of those who are to have the charge of the lives and health of its citizens, and accepting the degrees conferred by the medical colleges as sufficient guarantees of those qualifications, constitutes them licenses to practice. Having decreed that certain specified branches of study must be pursued, that three years must be given to their acquisition, and that the candidate must then be examined in these studies before he can receive a degree or license to practice, the State then leaves the fulfilment of these conditions to be determined by those who are peculiarly interested in granting the candidate his diploma—with all the advantages accruing to its possessor.

Why should the Government thus neglect or ignore its duty to guard the health as well as the persons and property of its citizens? Why, in a country numbering more than fifty millions of people, and requiring 86,923 physicians in which the vast majority of the population is unable to judge of the qualifications of a physician, should the Government fail to provide some adequate attestation of his fitness to discharge the most responsible duties of his calling? It is not thus in other civilized countries nor is it so in other vocations in this country. The lawyer must pass an examination adequate to test his fitness before he may practice at the bar of this State.

It may be here remarked that the knowledge of the physician is composed of branches of learning of which most other men, however learned in other respects, are profoundly ignorant. Upon the attainment of this special knowledge, however, depends his skill, and therefore it logically follows that none but a physician can judge a physician's fitness to practice. No layman can form a reliable opinion of the wisdom or skill of a physician's prescription in a given case. He can see no part of the process in the physician's mind by which, from the character of the symptoms, he decides upon the nature and seat of the disease, and therefore is unable to judge whether the remedies selected are the mature deductions of reason or the chance operations of ignorance. Says Prof. John Attfield: "The doctrines of free trade cannot be applied to professions. There cannot well be true freedom of trade when the power of judging of the article traded in or demanded is all and only on one side. It is for this obvious reason that the spirit of free trade has not been and cannot be applied to those avocations commonly termed professions. The

inhabitants of civilized countries, having desired legal or medical assistance, and well knowing that they were unable to form any immediate judgment on the quality of that assistance, have looked for and obtained external means of protecting themselves from bad law and bad medicine—means external to themselves. Such communities have required that lawyers, doctors and others should give some evidence of qualification to official examiners, or have aided professional men to erect certain social barriers known as etiquette and the power of the cold shoulder for the exclusion of quacks, charlatans and other unqualified persons from their ranks."

It should be the prerogative of the State to determine the educational qualifications of those who are to care for the lives and health of its citizens, and it certainly should not allow the teachers of a candidate to give him a license to practice. Almost all American medical schools are carried on as private commercial ventures. Each college now establishes a grade of qualifications which is most conducive to its own interests. The schools desire to obtain all the students possible; the student wishes to get all he can with the least expenditure of time and money; hence the tendency is for each of the incorporated medical colleges to underbid the others, in the paucity and laxity of its educational requirements.

We beg here not to be misunderstood. We are proud to admit that there are some medical schools which do require a high standard of medical education. They are however, very few in number, and since the general tendency is, as we have stated, as their students come from every possible walk in life—from the stable as well as from the college—as but few of the medical schools require any educational test for admission, and as but a small percentage of their matriculants is rejected, the vast majority of the candidates who enter the profession are but poorly equipped to discharge its duties.

The license to practice medicine is clearly a prerogative of the State. It is a proper function of Government, and is so considered in other countries. So far as the army and navy are concerned, it is so considered here. If the State interposes to protect the lives and health of its soldiers and sailors, do not other citizens deserve a like service at its hands?

In England the teaching power has been dissociated from the licensing power since 1858. In France the medical teacher is a salaried officer, appointed by the Government, and as he is paid by the Government whether his lecture room is full of students or entirely empty, he has no motive for laxity of teaching or examination. The license to practice is conferred by the Government. "The Minister of Public Instruction has not only the power of granting or withholding the diploma, but in addition, even in this

so-called Republican Government, he has the power of retiring any professor whose teachings is not abreast of the times." •

In Germany the medical schools are State institutions. The professors are State officials, appointed and paid by the State, and by the State held responsible for the proper instruction of students in all those branches of medical science in which the candidates for a license to practice are to be examined. When the student presents himself for matriculation at a medical school he must present a certificate of having passed the final examination of a Gymnasium in which the course of study is similar to that of our average American college. The student may begin or complete his studies at any medical school. When he has finished his studies he is examined for his university diploma. This, however, by no means entitles him to practice. He must now undergo the State examination for a license to practice. If he passes the State examination he is recognized as a physician and entitled to practice, can hold appointments to medical offices and insist upon the payment of his fees by his patient.

What, then, should constitute the proper condition of medical licensure in the State of New York?

We answer—

1. A fairly liberal preliminary education.
2. Four years of professional study.
3. Examinations and licenses by an impartial court appointed by the State.

Is such a plan as that we have outlined feasible? We believe it is. The necessary provisions are fully embodied in the admirable law passed May 16, 1872, Chapter 764 of the Revised Statutes, and amended July 26, 1881, chapter 679, Revised Statutes, save only that the law is optional with the student and not compulsory. The object of its originators was to establish a higher or honorary degree for the medical profession, of which only those persons who were really qualified and meritorious could avail themselves. As its possession would be a guaranty to the public that the physician who had obtained it was not only a diplomated but also a really qualified practitioner of medicine, it was hoped that the desire to possess it would furnish an incentive to the ambition of medical students, and would thus powerfully contribute to a higher standard of education among the members of the medical profession. The plan of examinations as provided by the law, and arranged by the regents of the University, was such that collusion, laxity, or partiality was impossible.

Under the law, the student might attend lectures at a medical college, or obtain his knowledge wherever he chose; in the hospital, laboratory, and dissecting room, in the colleges of Europe or in the quiet office of the country practitioner, or by a combination of

these methods. Before becoming a candidate for the degree, he was compelled, however, to prove that he had honestly studied medicine for three years, and to adduce proofs which should be satisfactory to the chancellor of the university of the possession of "a competent knowledge of all the branches of learning taught in the common schools of the State and of the Latin language." In order to pass the examination he was compelled to prove himself the possessor of a better preliminary preparation and of more medical learning than had ever before been required to obtain the degree of doctor of medicine in this State. Under the law, the examiners themselves were on trial. Their questions and opinions were placed on record, and the examinations were open to the public. The law, however, failed to effect the purpose for which it was intended. The reason of this failure is very plain. It was not compulsory. Its requirements were rigid, and collusion, laxity, and partiality were impossible. It was, therefore, far easier for a candidate to obtain a degree (which is substantially a license to practice) from one of the medical colleges, than to undergo the examination. This fully accounts for the very small number of applicants under the excellent law. A single paragraph of law, however, would, by making the statute of 1872 compulsory, convert it into a system as effective as the German States Examen, which in the judgment of the speaker, is by far the most efficient system in the world. We firmly believe, therefore, that some modification of this law, made compulsory, will at no distant date revolutionize the system of medical education in the State, for the following reasons:

First. It cannot, if made compulsory, fail to accomplish the object which all educated men so much desire—the elevation of the standard of medical education in this State.

Second. While it confers no special or pecuniary privileges upon a class, yet the degree will be an assurance to the public of the qualifications of all who shall attain it, and will, therefore, be a legitimate passport to professional success.

Third. The provisions of such a law will not in any way conflict with the vested rights and privileges of the medical colleges. It will, however, furnish an inducement to them to increase the thoroughness of their instruction, and to advance their standards of graduation, since in course of time, that institution would attain the highest reputation from which the largest number of graduates should have obtained this degree.

Finally. We believe that no other measure can be devised which would so powerfully tend to the advancement of sound practical knowledge among the future members of the medical profession, while its liberal, impartial, and entirely Catholic provisions

would leave no reasonable room for objection, and would eventually commend it fully to the good sense of the people of the State.

CLINIQUE.

WATER AS A CURATIVE AGENT IN HYDROCEPHALOID DISEASE.

BY A. P. MACDONALD, M.D., PORT JERVIS, N. Y.

DURING the late hot weather I was called to succeed the former physician of a little patient, sixteen months old, suffering from the above disease. The attending physician, one of the leading professional men of this county, gave a very grave prognosis, which I believed well founded.

The history of the case showed a moderately mild case of cholera infantum, of about two weeks' duration. I found the little fellow a poorly-nourished boy, pale, prostrated, pupils irregularly dilated, eyes suffused, and the stomach in such an irritated condition that he could be given only a very small quantity of food or drink at a time. I predicted convulsions, a condition of affairs which was verified in about twenty-four hours.

China off., which I gave hourly, seemed to be the indicated remedy. Next day I found the patient worse, with pupils irregular and insensible to light; eyes suffused with mucus floating over the cornea. Added to this were the cry and automatic motions so peculiar to this disease, and also convulsions, both clonic and tonic, which made swallowing very difficult.

On the next day I found the patient in profound coma, and the nurse had suspended medication and nourishment, because every attempt to administer anything produced strangulation.

I expected the child to die during the next day or two, the cornea having begun to assume that dry appearance which I have so often seen in this disease.

Although the little sufferer was in a state of coma, and was presumably unconscious to the wants of nature, yet not knowing but that the life before me, to all appearance living by organic life, had still some latent sensibility of suffering as expressed by the dry, parched tongue, I folded a piece of muslin about the size of my little finger, dipped it in cold water and placed it in his mouth.

By reflex action he began to suck. I directed the mother to do this as long and as often as he would suck, and also the medicine to be given in the same way. When I called the next day, I was astonished to find the child conscious and seemingly improved. The mother had faithfully carried out my instruc-

tions, and her patience and perseverance were amply rewarded by seeing her treasured child beginning to improve after sixteen long and dreary hours of unremitting attention.

For the next two days the patient received nothing but water and the prescribed medicine.

By this time all convulsive action had ceased, and the automatic motions of the limbs were present only at intervals. After this we began feeding him cautiously with Ridge's Food, which agreed, and he recovered very slowly. Recovery from the hydrocephaloid condition was prompt, notwithstanding that the bowel difficulty remained for about three weeks from date of my first visit.

This case of hydrocephaloid disease is the only one of recovery I ever saw, and I believe that the water given in a small but constant supply, was the curative agent; yet if the mother had not given her whole attention to feeding the little fellow with the water, I doubt very much if he would have recovered.

The diseased condition is said to be one of anæmia of the brain, which would imply a loss of red globules from the blood.

The result, in this case, would indicate that the disease was caused by a loss of volume rather than by the absence of red globules. This condition being brought about by the stools carrying off the watery constituents of the blood until the volume was so reduced that the brain became anæmic.

The irritable condition of the stomach prevented him from taking liquid food enough to supply the drain. Even although the quantity of liquids might have been sufficient to supply this drain, the presence of food was so irritating to the sensitive stomach and bowels as to establish a state of non-absorption, so that they passed through the intestines without any benefit to the patient.

The pathology of the exciting cause, cholera infantum, indicates that there is a pouring out of the watery constituents of the blood from the mucous membrane of the bowels, which condition would leave the stomach and upper part of the intestinal tract to supply water and nourishment by absorption, and if this tract be constantly irritated by the presence of food, a state of non-absorption may be established along the whole line of mucous membrane, which would obviously produce a loss of volume of the blood.

The good results from the judicious use of water in preventing enteric diseases in the Rochester Orphan Asylum, as quoted by Dr. Hills, in your August number, adds probability to the fact that too much food in the alimentary tract may act as an irritant and be the means of producing the condition above described.

A CASE OF PRIMARY EPITHELIOMA OF THE SOFT PALATE

BY H. I. OSTROM, M. D., NEW YORK.

A LADY, fifty-five years of age, presented herself for the treatment of "a soreness of the mouth."

The present trouble began about one month before consultation was sought, as a burning sensation, with occasional shooting pains, that involved the right side of the tongue and fauces. The tongue and muscles of deglutition had within that time become quite stiff; and the suffering was increased, not only by mastication, but also by the contact of food with the sensitive spot. These were all the subjective symptoms that could be obtained.

A laryngoscopic examination showed the right anterior pillar of the fauces to be occupied, to the extent of half an inch above the level of the tongue, and slightly as the palato-pharyngeus muscle passes to its inferior attachment, with a number of small, rather pale papillæ, that communicated to the finger a sensation of hardness and resistance, out of all proportion to the apparent character of the neoplasm. There was no ulceration, and neither the salivary nor the cervical lymphatic glands gave any evidence of involvement. The diagnosis of epithelioma was confirmed by a microscopic examination of a section of the growth. In this was seen the characteristic "bird-nest" groups of epithelial cells, in a matrix of connective tissue.

The treatment for this case should have been excision of the whole of the diseased mass, cutting through healthy tissue, and the conditions were favorable for a thorough cure. The disease was still a local one, and while a local disease epithelioma may be eradicated by an operation.

Notwithstanding that the nature of the disease was explained, and its probable issue if unmolested, an operation was refused before all other methods of treatment had been exhausted. The patient was therefore given *gallium aper.* internally, and externally, in the form of *gallium tincture* and glycerine equal parts, applied with a brush every three hours. I am glad to say, that, contrary to my expectations, the neoplasm has at least been arrested, and the suffering, which had become quite intense, controlled. It is early to predict a cure, the case not having passed from my hands, but certainly the neoplastic process is still limited, and without treatment, I have every reason to believe that it would have continued to involve tissue, and soon have passed into a constitutional disease with multiple secondary neoplasms.

In view of the absence among pathologists of a unanimity of belief concerning the origin of epithelioma,—the undecided question being, whether we

are to look upon the neoplasm as the primary or as the secondary symptom,—it may be well to take this quite typical case of epithelioma of the mouth, as a text from which to study the question of etiology.

Here is a perfectly healthy woman, whose social circumstances had always been those of affluence, and hence necessitated no privations, to reduce her vitality. A woman, however, whose physical zenith was reached early in life, she ceased menstruating at forty-eight—and hence her physical decay began correspondingly early. This is a point in her history that must be emphasized. No ancestry of disease could be discovered, or present conditions found that would direct attention to antecedents of the disease in the mouth. And still we know this patient to be suffering with a disease that, unless arrested in its earliest stages, is absolutely certain to destroy life, not only as a primary neoplasm, but by involving remote parts and attacking the very centres of vitality.

In regarding epithelioma as primarily a constitutional or general disease, have not pathologists begun to reckon at the wrong end of the equation? Have they not applied the deductive method of reasoning to the exclusion of the more comprehensive and far-reaching inductive method; and, beginning with the general truth that epithelioma is a malignant neoplasm, by means of a study of its different stages of development, reached the conclusion that it is also a constitutional disease; which deduction is certainly a true one, but the premises do not show it to contain the whole truth?

The older pathology, to which, however, there are still many adherents, seems to be based upon this method of reasoning, but it daily becomes more evident, that we must employ both induction and deduction to obtain the most comprehensive knowledge of physical science. Indeed, one method of reasoning strengthens and confirms the other, for together they make the complete method. But as in this question of the origin of epithelioma, a number of the factors must remain uncertain, we will reach a better knowledge of the disease, the more closely we reason by induction, and the more we recognize the importance of a carefully drawn analogy.

There is nothing in the earlier stages of epithelioma, to show that the neoplasm represents a more extensive cellular degeneration than is contained within the limits of the primary nodule. Neither has it been possible to discover the exact time at which the malignant changes in the epithelial cells begins. A perfectly benign affection, as *superficial glossitis*, or as *leucoplakia buccalis et lingualis*, or a mammary *adenoma*,—all of which diseases it will be remembered are of epithelial origin—may, from some not clearly defined cause, undergo such a process of metaplasia,

as results in the development of the most malignant of neoplasms.

Or an epithelioma may begin as a perfectly characteristic epiblastic neoplasm; that is, may from its earliest recognition, present the neoplastic arrangement of epithelial cells and connective tissue, and so remain for a length of time, without involving a single organ beyond the one affected, and interfering with no function. If epithelioma is primarily a constitutional disease—of which hypothesis, let us remember, there is no proof—how can we draw an analogy between such a history, and that, for example, of a tertiary syphilitic neoplasm, which is the culmination of the constitutional depravity, and which is preceded by all the well known conditions of physical decay, that belong to syphilis? In epithelioma, constitutional symptoms do not appear until the primary neoplasm is known to infect the lymphatics, and through them invade remote parts; not until then does the disease resemble in the least particular, any primarily constitutional disease with which science is familiar.

We are in possession of only one class of facts that assists in clearing the obscurity that surrounds the etiology of epithelioma. I refer to physical decay, which with sufficient frequency accompanies the development of epithelioma, to suggest a certain relation between the physiological, and the pathological phenomena.

It has been observed, that epithelioma belongs to the declining years of life; to the period at which organs and functions begin their folding-up process. Especially are these changes known to take place in the parts in which epithelial neoplasms most frequently develop—the glands.

Now, according to the known laws of embryonic differentiation, epithelial neoplasms can have only an epithelial genesis, and while, in a limited sense, all epithelial cells perform a secreting function, the predisposition to neoplastic development increases with this functional activity; and hence from their very physiology, the epithelial cells of glands, the secreting cells, are prone to epithelioma. In glands, and during the glandular function, epithelial cells are subject to premature decay, and perverted action: *first*, by reason of this function, which involves rapid proliferation, and *second*, because, when the gland function is finally folding up, from an excess, or decrease of action, there are likely to be left vacuolated cells, or cells whose powers are expended more in the direction of proliferation than functional activity, that thus become centres of abnormal multiplication and infection. These changes pictured in glands, are typical of physical dissolution, and while they may involve only a single organ, they are more usually associated with a general decay; but for that reason, we cannot say that epithelioma is primarily a general

disease; the lowering of resisting power, and the interference with nutrition that accompany declining life, cannot be shown to have any other relation to epithelioma, than to predispose to its development.

In a mere sketch, it is impossible to more than mention a few facts, and indicate the course of reasoning, that has led to a belief in the local origin of epithelioma; but as we remove from our conception of epithelioma, and of neoplasms generally, the idea of anything specific in their cellular elements, and recognize this disease as within the realm of cellular pathology, as an outgrowth of previously healthy cells, as an illustration of cellular continuity, the belief in the local origin of many pathological new formations will receive additional confirmation, and will serve surgery practically, by sanctioning operative treatment in the early stages of the disease.

A CASE OF FIBROID TUMOR.

By Mrs. E. G. Cook, M.D., N. Y.

A CASE of fibroid tumor of the uterus, as large as a child's head at full term, was cured by iod. of lime, one grain to an ounce of distilled water, a teaspoonful four times daily. In connection, a diet without starch or sugar, consisting of meat, fruit and vegetables, except those containing the above ingredients, followed strictly one year, caused its entire disappearance. Bread made with thin sweet cream and entirely of wheat flour was allowed once daily. This I can substantiate by the patient herself and by Dr. Walsh, of Detroit. I am giving the treatment to three patients now, but as the tumors were much larger, more time will be required. I use, as an auxiliary, an ointment of one drachm of iodine crystal, two drachms of iod. potass., and one ounce of glycerine. Mix and apply over the tumor once in four days.

The one upon which treatment was commenced in March has more than half disappeared, and the remainder is soft. The patient believes she gains every day. The others do not show so much improvement.

I am giving this subject the closest attention, and wish other physicians would help in saving a host of sufferers from death or from the use of the knife.

REGULATIONS GOVERNING THE HEIGHT OF HOUSES.—The number of dwelling houses in Paris is about 90,000, the area of the whole city is twenty-five square miles, and the population over 2,000,000. A recent measure of the Conseil D'Etat ordains that henceforward no flats shall be less than eight feet high; that in streets twenty five feet wide the height of the houses must not exceed forty feet; in streets between twenty-five and thirty-two feet wide the height must not exceed fifty feet; in streets above sixty-five feet wide the height must not exceed sixty-five feet, and no buildings are to have more than seven stories, all included.

SOME INDICATIONS FOR THE USE OF MEDICATED TABLETS.*

CARBO ANIMALIS, $\frac{1}{16}$ to $\frac{1}{8}$, trit. In glandular enlargements, syphilitic glandular engorgements, low states of the system with offensive secretions.

Caulophyllin, $\frac{1}{16}$, trit., acts chiefly on the uterus; in dysmenorrhœa, uterine cramps, spurious labor pains, abortion and after-pains; acute rheumatism of the small joints. It has been found useful in chorea, in spasms from suppression of menses.

Causticum, $\frac{1}{2}$, 1 and 2 minims. In laryngo-tracheal catarrhs, in paralytic affections, paretic states of the larynx and bladder; aphonia, cough with involuntary discharge of urine; a cough which fails to bring up the expectoration, which must be swallowed; over-straining of the voice in public speakers and singers.

Cedron, $\frac{1}{16}$ to $\frac{1}{8}$, trit. In intermittents, the chill coming on towards evening with little or no sweat, but much cerebral congestion; neuralgias and other disorders in regularly recurring paroxysms.

Cerium oxal., $\frac{1}{16}$ to $\frac{1}{8}$, trit. Irritative dyspepsia and vomiting, especially when dependent on pregnancy, and in sympathetic uterine vomiting generally; hysteria from anxiety, grief and overwork; in gastrodynia, chronic cough, epilepsy.

Chamomilla, 1 to 2 minims. Excessive sensitiveness to pain, spiteful, sudden, uncivil irascibility; in various forms of neuralgia with great nervousness and with the above symptoms; in faceache, toothache, diarrhœa of teething; difficult dentition, with restlessness, fretfulness, and spasms; child must be carried about to be quieted; symptoms all worse at night.

Chelidonium, 1 minim. In hepatic disorders, pain over the liver and in the right shoulder, stools soft and bright yellow, or whitish and costive; jaundice and high-colored urine; in whooping-cough.

China, 1 and 2 minims, $\frac{1}{16}$ to $\frac{1}{8}$, trit. In intermittent fevers; in anæmia from loss of blood, from diarrhœa, diuresis, or excessive sweating, from over-lactation, seminal losses; in intermittents when the chill, fever and sweat are evenly well marked, rumbling in the head; constriction from ear to ear over vertex, sensitiveness to currents of air, sinking at the stomach, emptiness without hunger; contractive pains under the lower left ribs; mental depression with irritability; in lienteria, acute summer diarrhœa; morbid excitement of sexual organs with involuntary emissions of semen; in certain hepatic troubles.

Cimicifuga, $\frac{1}{2}$, 1 and 2 minims. In rheumatic affections, especially muscular rheumatism, pleurodynia, lumbago and torticollis; in rheumatoid arthri-

tis, especially when of uterine origin, worse at night and in wet or windy weather; in chorea of rheumatic basis; in uterine troubles, dysmenorrhœa and after-pains; uterine epilepsy and hysteria; puerperal melancholia; infra-mammary pain; sufferings of the climacteric with sinking at the stomach, pain on the vertex, irritable disposition; hypochondriasis of spermatorrhœa.

Cistus can., 1 minim. In strumous affections; enlarged lymphatics; white swelling; scrofulous inflammations of the eyes, ears and nose.

Clematis, 1 minim. Orchitis, epididymitis, indurated swellings of the testes; in secondary syphilis and after abuse of mercury; in gonorrhœa and spasmodic stricture; enlarged lymphatic glands; chronic inflammation of the eyelids with swelling of the Meibomian glands.

Cocculus, $\frac{1}{2}$, 1 and 2 minims. In vomiting, when of a cerebral origin, as in sea-sickness and from riding in a carriage; in the vomiting of migraine and of cerebral tumors; abdominal spasms with great production of wind, especially in women, "menstrual colic."

Codeine, $\frac{1}{16}$ to $\frac{1}{8}$, trit. A hypnotic and sedative; in irritation and hyper-secretion of the bronchial mucous membrane when other opiates are not well borne.

Coffea, 1 and 2 minims. See Caffein.

Colchicum, $\frac{1}{2}$, 1 and 2 minims. In gout and its complications; gastro-enteritis, dysentery, deadly nausea and prostration, and can't bear the smell of cooked food.

Collinsonia, $\frac{1}{2}$, 1 and 2 minims. Collinsonin, $\frac{1}{16}$ to $\frac{1}{8}$, trit. Especially in diseases of the rectum; constipation and hemorrhoids; when these conditions exist in pregnancy with intense pruritus; dysentery with colicky pains in the hypogastrium.

Colocynth, $\frac{1}{2}$, 1 and 2 minims. In colic and diarrhœa; a twisting, burning pain about the umbilicus, worse from food and better from pressure; great tenesmus; in sciatica and neuralgia; in rheumatic and gouty-rheumatic diatheses; arthritic ophthalmia; in dysentery.

Conium, 1 and 2 minims. Hypochondriasis, especially from continence; remedial in scirrhus, especially of the breast; swollen and indurated glands, the photophobia of strumous ophthalmia, severe mammary pains from engorgements and tumors; a periodical dry cough excited by itching, grating, tickling in the throat and behind the sternum, and worse from lying down and talking, especially useful in old people.

Corallium rubr., $\frac{1}{16}$ to $\frac{1}{8}$, trit. Nervous cough, asthma Millari, and endemic whooping-cough, especially in the spasmodic stage; laryngismus stridulus.

* Continued from page 140 of THE TIMES.

Corydalis form., 1 minim. Syphilitic ulcerations and nodes.

Cubebs, $\frac{1}{2}$, 1 and 2 minims. In gonorrhœa, vesical catarrh and leucorrhœa, bronchial catarrhs with copious secretions, atonic dyspepsia.

Cuprum acet., met., sulph., $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$. In Asiatic cholera, cramps, convulsions, spasmodic affections of the respiratory organs, laryngismus, whooping-cough, asthma; in epilepsy, convulsions and abdominal spasms, and cramps in various parts of the body call for it.

Cypripedin, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Hysterical complaints; chorea and reflex epilepsy; functional irritation of the brain, especially in very young children, from teething, or intestinal irritation; jactitation and trembling in typhoid fevers.

Digitalis, $\frac{1}{2}$, 1 and 2 minims. Digitalin, $\frac{1}{10}$, trit. A cardiac tonic; enfeeblement of the walls of the heart; vertigo, tendency to syncope, dyspnoea and palpitation; a slow pulse, or *rapid, weak and irregular* pulse, with blueness and venous hyperæmia; in organic disease of the heart, valvular lesions especially, with cardiac dilatation; dropsy, ash-colored stools; in spermatorrhœa; the prevailing mental state is sadness.

Dioscorea, $\frac{1}{2}$, 1 and 2 minims. Dioscorin, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Bilious colic; violent pain about the umbilicus.

Drosera, $\frac{1}{2}$, 1 and 2 minims. Spasmodic cough; cough from tickling in the larynx, with vomiting of food; in whooping-cough.

Dulcamara, 1 minim. In certain skin diseases, especially urticaria and crusta lactea; rheumatic and other complaints arising from getting wet; paralysis from the same cause; diarrhœa from a chill in damp weather; in catarrh of the bladder, even when chronic, with much mucus and offensive urine; and in catarrhs of all the mucous membranes arising from colds and getting wet.

Elaterin, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Profuse watery discharges from the mucous membranes; especially in the gastro-intestinal tract; a frothy, watery, and very profuse diarrhœa; choleraic diarrhœa and vomiting.

Ergotin, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Secale cornutum, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. To check the tendency to miscarriage; frequent labor-like pains, without discharge; after-pains when continuous; menorrhagia; to arrest hemorrhage, to occlude aneurisms, to starve fibroid tumors, and to diminish congestion of the brain and cord.

Euphorbia, 1 minim. Endemic cholera, and choleraic diarrhœa; spasmodic cough with stitches from the pit of the stomach to both sides of the chest.

Euphrasia, 1 minim. Catarrhs of the conjunctival and nasal mucous membranes with profuse secretion;

the secretion from the eyes is acrid, while that from the nares is bland; the coryza of measles; in the beginning of strumous ophthalmia.

Euonymus, 1 minim. A drastic cathartic; profuse, violent stools with death-like nausea, excessive tormina, much flatus, great prostration, and cold sweats.

Ferrum, $\frac{1}{10}$ to $\frac{1}{10}$, trit. In anæmia; headache from passive congestion (F. pyrophos.); recurrent epistaxis (F. phos.); hæmoptysis with a tickling cough and oppression of the chest (F. acetat.); phthisis florida (F. chlorid.); vesical catarrh and gleet; diurnal enuresis (F. phos.); Bright's disease; uterine congestion and menorrhagia; uterine displacements (F. iodid); rectal irritation in sympathy with the womb; rectal irritation in the male with tenesmus; prolapsus recti in children; in lenteria; hammering headache, red face and enlarged veins; quarrelsome and fitful mood.

Gallie acid, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. In hemorrhages, especially in hæmoptysis and hæmaturia; in dropsy and albuminuria.

Gambogia, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. A drastic purgative; summer diarrhœa with severe colic; dysentery, especially, in young persons.

Gelsemium, $\frac{1}{2}$, 1 and 2 minims. Gelsemin, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Gelsemin, sulph., $\frac{1}{10}$, $\frac{1}{10}$ to $\frac{1}{10}$, trit. A febrifuge; fever not very active, pulse not very rapid, full and soft; the tongue has a moist, white fur; oppression, with dull pains in head, back and limbs; fever of a remittent type; enuresis of old persons, a post-diphtheritic paralysis of throat and body generally; headaches from venous hyperæmia, vertigo, diplopia; dysmenorrhœa and after-pains; spinal congestion; cerebro-spinal meningitis; in ague, worse toward night, and decline of the heat *without* sweat towards morning.

Gossypin, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. A decoction of the root used in strangury and gravel; an emulsion from the seeds used in dysentery, and as a galactagogue; has a specific influence upon the uterus, but the drug requires further proving, no characteristic symptoms indicating its use.

Graphites, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Found useful in skin diseases; eczema impetiginodes; psoriasis palmaris; rhagades, when the exudation is thin, sticky, glutinous, transparent; alopecia, and abnormal growth of the nails; blepharitis ciliaris; delayed menses, with great constipation, the stools are large and knotty, with much straining; unhealthy skin, with intertrigo; every injury suppurates; old ulcers, with fetid pus, proud flesh, itching and stinging; burning pain in old scars.

Guaiac, 1 minim. Guaiacum, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, $\frac{1}{10}$, trit. Rheumatic and gouty pains; rheumatic stiffness in the nape of the neck and small of the back; pains in

the bones of the legs, the limbs feel swollen; darting pains from the feet to the knees; said to prove abortive in acute tonsillitis; after abuse of mercury.

Hamamelis, 1 and 2 minims. In hæmorrhages and the hæmorrhagic diathesis; epistaxis, hæmoptysis, hæmatemesis, mælena, hæmaturia and uterine hæmorrhages; vicarious menstruation; in phlebitis and varicose veins, in hæmorrhoids that bleed profusely; violent neuralgic pains in the testicles and in the ovaries; in gonorrhœal ovaritis and orchitis; in dysmenorrhœa; gonorrhœa in the female and vaginismus.

Helonin, $\frac{1}{10}$, $\frac{1}{6}$, $\frac{1}{6}$, $\frac{1}{6}$, trit. In renal and uterine affections; reported curative in phosphatic urine, urinary irritation with impotence, diabetes and albuminuria; a "uterine tonic;" in prolapsus, menorrhagia, leucorrhœa. The key-note of the subjective symptoms seems to be "amelioration while doing something."

Hepar sulph c., $\frac{1}{10}$, $\frac{1}{6}$, $\frac{1}{6}$, $\frac{1}{6}$, trit. Abscesses, boils and scrofulous sores, and in many suppurative processes; it hastens suppuration, circumscribes the inflammation; scrofulous nodes and suppurating scrofulous glands; in pneumonia and other lung affections when the exudation and expectoration become purulent; in empyema; in pleurisy, with copious plastic exudation; follows mercury well in hepatic disorders; hæmorrhoids of hepatic origin; skin affections (locally and internally); scabies, grocer's and wool-weaver's itch; psoriasis palmaris, with fissures; ulcers; diseases of the respiratory mucous membranes; in blepharophthalmia; in onxy, hypopion and prolapsus iridis; ophthalmia scrofulosa; in croup, when the breathing becomes rattling; the barking cough left behind after measles; great sensitiveness to touch, draught of air or other impressions on the senses; antidotes the excessive use of mercury.

THE CONTAGIOUSNESS OF PHTHISIS.—The germs producing tubercular diseases are not diseased germs; they are germs in perfect health as to themselves, and are capable of producing disease only where a nidus suitable for their development is found. If the body does not afford a suitable nidus the seed planted therein could not germinate, grow, bloom or fructify. This peculiar condition of various parts of the animal body, which offers a suitable soil to disease-producing germs, is familiarly known in medicine as *predisposition*. It is that which is transmitted from parent to child—the predisposition to certain diseases, and not the disease itself. A tuberculous parent may transmit this soil, this habit of body, this *predisposition*, to his or her offspring, but cannot, under any circumstances, at the same time transmit the seed in a dormant state already planted in that soil. Dissections, as already stated, have not revealed tubercles in the new-born. They may be born with many physical imperfections, but never with any trace of tuberculosis. The individual must be subjected to disturbing intrinsic causes before there are any evidences of tuberculosis, and when such manifestations do

occur, they are of a peculiar and constant kind. One case of tuberculosis is as much like another as one case of small-pox is like another of that disease. When we observe a constant recurrence of symptoms and pathological changes in a series of cases, we naturally conclude that a specific cause is operating upon a peculiar condition of body to produce such a uniform result. It is evident that the offspring of phthisical parents sometimes escape the disease, for M. Pidoux states that not over twenty-five per cent. of those born of consumptive parents themselves become phthisical. The predisposition is not only inherited, but is also acquired by the offspring of healthy parents; thus parents of non-phthisical children may themselves acquire the disease under conditions favorable to development. It is not contended by those who believe in and know the fact of the contagiousness of phthisis, that the disease is thus contracted as frequently as other infectious or contagious diseases are acquired; but I am free to say, however, that there is far more danger to be dreaded from nursing the phthisical in private practice, than there is from nursing cases of typhoid fever. In the latter disease the *materies morbi* reside in the excreta, and by cleanliness the infectious element is promptly removed, and the danger lessened. This is not the case in phthisis, for in that disease the *material cause* resides in the effete matter constantly being thrown off from the lungs of the stricken individual, especially in the advanced stage of the disease.—W. H. WEBB, *Medical Bulletin*, August, 1884.

ALEXANDER'S OPERATION OF SHORTENING THE ROUND LIGAMENTS OF THE UTERUS FOR RETROVERSION.—Dr. Paul F. Mundé, in a communication to the *N. E. Medical Monthly*, May, 1885, reports four cases in which he made practical trial of the operation proposed by Alexander, of Liverpool, for intractable displacement of the uterus, and which consists in cutting down on the terminal fibres of the round ligaments where they emerge from the external inguinal ring, and drawing out the "slack" of the ligament, and attaching it to the pillars of the ring, thus tilting the fundus uteri forward and fixing it there. His experience in these instances leads him to the following conclusions: 1. That Alexander's operation is chiefly indicated, because most feasible, in thin, spare women, with very little abdominal adiposity, in whom the pubic spines and the pillars of the external inguinal rings can readily be detected by palpation. 2. That in stout women the adipose tissue in the inguinal ring so obscures the terminal fibres of the round ligaments as to render their recognition and isolation a very difficult or impossible feat. 3. That in some women, both stout (especially so) and spare, the ligaments are deficient in the white tendinous sheen which renders them easily recognizable, are, therefore, wholly muscular, and when isolated are very liable to break in the depth of the inguinal canal when drawn upon, and thus invalidate the operation even before it is concluded. 4. That it is impossible to know beforehand in which women the ligaments are normal in composition and insertion, and that, therefore, this operation must always carry with it an element of uncertainty in its very execution, which will prevent its prognosis from ever being as assured as that of many other plastic operations. 5. That with the exception of the tendency to deep suppuration in the inguinal canal, the operation is devoid of special danger; and 6. That in certain well-indicated cases (movable, flabby uteri, with retroversion or descensus; spare, slender women, with well-developed pubic spines and distinct external inguinal rings) the ligaments can easily be found, isolated, drawn out and shortened, and the fundus uteri permanently and satisfactorily fixed in the normal antverted position.

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EDITORS:

EGBERT GUERNSEY, M.D.

ALFRED K. HILLS, M.D.

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"A regular medical education furnishes the only presumptive evidence of professional abilities and acquirements, and ought to be the ONLY ACKNOWLEDGED RIGHT of an individual to the exercise and honors of his profession."—Code of Medical Ethics, Amer. Med. Ass., Art. IV., Sec. 1.

Our practice is not "based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and of the aids actually furnished by anatomy, physiology, pathology and organic chemistry."

THERAPEUTIC RESEARCHES UPON ASIATIC CHOLERA DURING THE EPIDEMIC OF 1884, IN NAPLES.

IN none of the cities in Europe was the cholera of 1884 more fatal than in Naples, nor was there larger opportunities to watch the progress of the disease in its different stages, and to notice the effects of treatment or to study the cause of the disease. From the commencement of the epidemic in Naples till October 10, the deaths in the city from cholera numbered 6,042, showing a greater fatality than any previous epidemic, including that of 1837, which ranked before as the most fatal. Naples has a large number of faithful, energetic, scientific physicians, who, during the fearful epidemic, devoted themselves, heart and soul, to their work, and were especially aided by the heroic sanitary corps of the White Cross. Consul Frank G. Haughwout has forwarded to the State Department, at Washington, a translation of an exceedingly interesting article by Dr. M. Semmola, Professor of the University of Naples, Parliamentary Deputy, Chief Physician of the City Hospital, and Chief of the Sanitary Corps of the White Cross, from which we make such extracts as will show the opinions of that thoughtful school of physicians in Naples who oppose the theory of the microbe in cholera as being the origin of the disease. Even admitting the theory of the microbe, according to the conclusion of Dr. Koch, Dr. Semmola says:

"Yet I am convinced that theory can never be taken as the point of departure for the rational and scientific treatment of cholera. Hence, I do not hesitate to conclude, after observations made upon a large scale, that the anti-microbe or anti-parasitic treatment is not at all, and never will be, the proper method by which to arrest the development of the disease; and for the following reasons:

"(a) Because the best known and most powerful parasite-destroying agents can never be introduced into the intestinal canal in proportions necessary to kill the microbe without danger to the patient.

"(b) Because, even if one could introduce into the *ileum jejunum* (the principal locality to be reached) a sure parasite-killing agent, inoffensive to man, the death of the microbe would constitute but a small portion of the treatment, because the gravest phenomena of cholera are undoubtedly due to a chemical principle which poisons successively the nerve centres and which is, in the course of formation in the intestine when the diarrhoea advises us that the choleraic attack has commenced. I believe also, that the diarrhoea itself, from its beginning, instead of being an irritating effect due to the microbe, can be looked upon as the first result of the poisoning of the abdominal sympathetic nerve centres, through their incontestable influence upon the circulation and the nourishment of the intestine. It is possible thus to explain perfectly the intense hyperæmia (*rouge hortense*) of the mucous membrane, the profound change in the intestinal epithelium, and the disturbances of secretion which constitute the first stage of the sickness. Hence, even admitting the parasitic point of departure, the infection due to the microbe would begin its deadly work in the intestine as a hidden enemy, who prepares the materials of its attacks, which are then absorbed in order to produce progressively the poisoning of the different nerve centres presiding over the functions successively disturbed. That which is a matter of certainty to me is, that all the anti-parasite treatments recommended hitherto are but scientific charlatanism which are sought to be justified by badly made, or badly interpreted, experiments, all of which prove absolutely nothing, because they have been used in cases of diarrhoea (cholérine), curable by all sorts of treatments in which the hygiene is rigorously regulated, without taking into account all the other numerous cases in which, the famous enema being used, the choleraic symptoms have resulted fatally.

"The specific remedy in cholera, or the quinine of cholera, so to speak, has not yet been discovered, and I am constrained to believe that it will never be discovered by rational means, that is to say, by means of the laboratory.

"I believe it to be a great error to confound the

infection of cholera with the infection of marsh fever. This error was very pardonable to our ancestors, among whom was the late Professor Galbiati, the celebrated Neapolitan physician (1836), who called the cholera the pernicious fever of the Ganges. But to-day this idea constitutes a deplorable pathological and clinical confusion, for it is well known that in the regions where the cholera is epidemic, there also exist marsh fever epidemics, and that even there are places (Cochin China) where rage at the same time the two epidemics, that is to say, cholera and the pernicious cholera-form fever, and that the salts of quinine, by their therapeutic results, are one of the surest means by which to distinguish the diseases and prove their different natures or qualities, because by the use of said salts the latter is cured and the former is not. It matters little whether one has the identical form of malady or one similar to it. Their identity proves only that it is the same seat of the organism that has been attacked, yet by a different cause; and one can then understand easily that in order to be able to cure these identical morbid forms, arising from a different cause, it is necessary to use a different remedy in order to combat each one of the causes."

As there is no specific for cholera, our author sees but two possible ways of combating the disease, the symptomatic, in which drugs are given as the disease develops, according to the principle of what Bartholow calls the antagonism of drugs to disease, and the physiological treatment, which, without disturbing the system with powerful medicinal action, proposes only to increase, by all means, the resistance of the vital force against the invasion of the disease. He insists upon absolute repose of the organs attacked, by complete fasting, at the slightest manifestation of diarrhoea, which must be continued until a favorable reaction is obtained. Even a few teaspoonfuls of bouillon, administered too early, have caused a recommencement of the most serious choleraic forms. As soon as the patient can bear food, which is not until a healthy reaction has taken place, milk, in small doses, is the best food. Heat, in the form of a warm bath, should be used early in the disease, repeated at intervals of one or two hours, according to the judgment of the physician, wrapping the patient, when he comes out, in woolen coverings and giving him warm, lightly alcoholized or aromatic drinks.

"The prodigious biological effects that the warm bath produces, in the first period of the cholera, cannot be dreamed of in the algid and asphyctic periods, for the simple reason that the biological conditions of

the cutaneous surface and of the rest of the system do not permit the realization of the action which the bath should produce, and which is the cause of these great curative benefits in the first period. In fact, the warm bath excites the peripheric nervous network. It also excites, by reflex action, the centre of circulation, and consequently produces a harmonious restoration of physiological functional relation between the cutaneous surface and the gastrointestinal mucous membrane. Finally, the warm bath favors with the perspiration the elimination of the poisonous principles, which doubtless are the cause of the poisoning of the nervous system, together with the profoundly characteristic disturbances of the secretions of the vasomotor system, etc., which constitute precisely the greatest danger in cholera.

"It is indisputable that opium, handled at the proper time, and when too much is not expected from its action, completes, so to speak, the physiological treatment, because it may be well said that it puts the nerve centres in a condition of the greatest resistance, and thus diminishes the poisonous effects of the principles absorbed by the intestinal surface. It resembles almost the injections of curare, which are used in the cases of animals poisoned by strychnine, in order to prevent the development of some of the effects of the poison.

"In the period of reaction the treatment should be of the simplest character. If the reaction is produced slowly and without much fever it is a question simply of hygienic treatment, and, above all, one of diet, because, as I have already said, the return to feeding ought to be made with great caution and rigor, and one must never forget that the slightest error may be fatal. If, on the contrary, the reaction comes suddenly and with high fever an anti-febrile treatment should be followed. It is useful at this point to remember that the best nourishment is the milk diet, especially if with the fever there is gastric localization (cramps, pains, vomiting, etc.).

"It has been frequently observed that these symptoms begin anew in the period of reaction; but they are no longer nervous symptoms due to choleraic poisoning, but they bear a relation to gastritis, caused usually by the abuse of alcoholic or other irritating substances used blindly during the first period of the disease.

"In the treatment of the period of reaction there is one remark to be made of great interest, from a clinical and therapeutical point of view, namely, the persistence of certain disturbances, closely related to the functions most strongly affected, during the development of the choleraic attack. At one time it may be feebleness of the heart's action; at another, epigastric pains with loss of appetite, etc.; at another, the persistency of the uniform cyanosed tint (semi-

asphyctic state), with which the invalid experiences great feebleness.

"These phenomena are but the result of the exhaustion of the ganglionic and bulbar nerve centres which have been principally affected by the choleraic poisoning. This poison no longer exists. It is a question simply of inheritance, and, in proportion as one has observed, during the serious stages of the disease, a predominance of gastric symptoms, or the symptoms of heart or asphyctic troubles, so one must expect thereafter evidences of a weakness peculiar to each cholera patient. In these moments of weakness, which constitute new dangers for the patient (especially feebleness of the heart's action), the treatment furnished by rational therapeutics renders the greatest service, because one may count surely upon the realization of the biological effect expected from some substance or other, which, given during the first period of the disease, could not produce the same therapeutical results, because, as I have already said, the mechanism of its biological action could not be produced, the nervous functions being profoundly disturbed by a material condition of a chemical order (poisoning), which hinders the proper action of the substance employed. Thus I recommend hypodermic injections of the salts of caffeine in cardiac hyposthenia; the use of the salts of strychnine in epigastric troubles, and the inhalations of oxygen, with small doses of valerianate of quinine (hypodermic), in the condition approaching to cyanosis."

The conclusion formed by the most careful observers in Naples is that the microbe theory of Koch, even if its truth be admitted, casts no light upon the treatment of the disease, for which, as yet, no specific has been found. The physiological and symptomatic treatments recommended by our author are directly in accordance with the teachings of the new school, and have thus far been more successful than any other. The principle, whether called the antagonism of drugs to disease or similia, is one and the same. Physiological facts and pathological conditions are always to be borne in mind, but the specific to this disease, as well as to others, we are convinced will be found, if it ever is found, not in the laboratory, but by meeting symptoms with drugs whose power and effects have been carefully studied and analyzed.

CHINESE EMIGRATION.

THE question of Chinese emigration has, within the past few years, formed an important factor in the political discussions and the tenets of parties on the Pacific slope of this country. From the report

of a special committee in San Francisco, published in the *Daily Examiner* of July 21, to investigate the condition of Chinatown, in that city, we can readily see that the factor of cheap labor forms only a small part of the bitter and intense opposition of the respectable portion of the community to such a den of filth and vice and corruption as festers in their midst. By constant watching and close supervision of the inhabitants of Chinatown a marked improvement has taken place, but, notwithstanding this, the committee says of its present condition, in its better aspects, in its by-ways, its slums and its purlieus, its habitations, places of amusement, and business, it is to-day the filthiest spot inhabited by men, women and children on the American continent. All great cities have their slums and localities where filth, disease, crime and misery abound, but in the best aspect which Chinatown can be made to present, it must stand apart, conspicuous and beyond them all in the extreme degree of all that is horrible, the rankest outgrowth of human degradation that can be found upon this continent. Here, it may be truly said, human beings exist under conditions (as it regards their mode of life and the air they breathe) scarcely one degree above those of the rats and vermin which burrow along the filth of the water front. Chinatown has a population of about 30,000, sleeping, most of them, two in a bunk, the bunks being occupied by relays of sleepers, during the day and night, the women and children being stowed away in every conceivable nook and corner, without any special accommodations being provided for them. The rule seems to be that the female sex are held in a state of concubinage or else follow the admitted calling of the prostitute, generally of the lowest possible grade, with all the wretchedness of life and consequences which the name implies. In one house alone the inmates consisted of nineteen prostitutes and sixteen children. Men, women and children herd together in a life and with surroundings of which but few have any conception.

We can very easily see how difficult it is to deal with such a class of people, and how, as from a polluted fountain, the seeds of disease may find their way into the general community. White women, in this investigation, were found in large numbers, living in these dens and consorting freely with the inmates. Syphilis derived from the Mongolian race,

assumes the most obstinate and malignant character, and there is no doubt that this and other diseases peculiar to that people are communicated to those who are not of their race.

The committee wisely conclude that, pending the action of legislative bodies as to the question of emigration, city laws enforcing rigidly certain sanitary measures, such as apartments large enough and with sufficient ventilation for the necessary amount of air to each individual, should be rigidly enforced. By making living more expensive, the crowds which now herd together will be scattered, to the great benefit of the community, but it is a question if any great measure of success will follow the most rigid enforcement of rules among a race which, for ages, has been steeped in poverty and filth.

MEDICAL EDUCATION.

WE are pleased to see in the report of the proceedings of the University Convocation, recently held at Albany, that Dr. Wm. H. Watson, one of the Regents of the State University, advocates in a very able paper, which will be found elsewhere, precisely the views for which we have contended in this journal. Briefly summarized, they are :

1. A fairly liberal preliminary education.
2. Four years of professional study.
3. Examination and license by one impartial court appointed by the State.

A law embodying these provisions would meet the whole question and silence, for a time at least, the annual professional clamor for legislative aid in protecting the people from the profession and the profession from the public.

Speaking of the law of 1872, Dr. Watson says the reason of its failure was in its not being compulsory. This was not the only reason. It permitted each of their great schools of medicine to have its own examining board, and the student to elect whether he would be examined in the therapeutics of the old, the new or the eclectic school of medicine. Its tendency was to uphold and bind together, with all the strength of the law, with all the power of the State, those partition walls between schools which, under the influence of liberal ideas, was first disappearing. If Dr. Watson favors, and we so understand him, one examining board, appointed by the State, before whom every applicant for a license shall appear, we

join with him heart and soul. Any other board will meet with as complete and entire failure as that of 1872.

THE INTERNATIONAL MEDICAL CONGRESS.

THERE is no prospect of the next meeting of the International Congress being held in Washington in 1887, as was contemplated, on its adjournment at Copenhagen, in 1884. The original invitation for the Congress to hold its next session in the United States, says Dr. John S. Billings, who was one of the original committee, and on this statement represents the opinions of that committee, "was purposely worded as coming from the medical profession of the United States, and not from any association, only in order that all regular physicians in the country, and in particular the various important societies devoted to special branches of medicine, such as the Gynecological, Ophthalmological, Laryngological, and also the societies in our large cities which are specially devoted to scientific work, should feel that they were included and must share the responsibility of providing a proper reception for the Congress. The Congress is a purely scientific body, taking no cognizance of questions of medical ethics or police. It accepted the invitation on the supposition that its rule in this respect would not be interfered with, and that those who would come to us in 1887 would meet our various eminent specialists, whom they know either personally or by reputation." * * *

The old code men, unabashed by their shameful defeat in their attack upon the distinguished President of the New York Academy of Medicine, Dr. Fordice Barker, have plotted to get the whole organization in their hand with such success that the best men in the profession throughout the country are in hostility to them, and the profession abroad are looking upon their course with astonishment and contempt. The original committee consisted of nine names, and while in attendance at the Congress in Copenhagen inquired minutely into the mode of organization and the methods of work of the Congress. They were informed by the founders and chief promoters of the Congress that its membership was catholic in the broadest sense of the term, that it embraced the workers of every clime and nationality without regard to sect or party, the only test of admission being that they should belong to the universal

brotherhood of legitimate science. The work of this body, they stated, was confined to science and every other business was rigorously excluded. An association such as this, working in the true spirit of science, bringing together thoughtful men and careful investigators from every part of the world, discussing with freedom and intelligence the great questions which agitate the public mind and marking out new lines of thought, would be of incalculable advantage to the world by bringing harmony out of discord and uniting in strong and determined efforts minds which had before been antagonistic.

The committee, acting in the spirit of the founders of the Congress, and in accordance with the power delegated to them by the original resolution, added to their number thirty-four names of men prominent in the various departments of the profession in the United States.

At the meeting of the American Medical Association, in New Orleans, where the plot formed by the old codists to capture the organization was carried into effect, but five members of the committee were present. The handful of agitators, bent upon revolution, with their plans well matured and their tools in readiness to perform the work assigned to them, unmasked their batteries. In the midst of the astonishment of those not in the plot, and in a whirlwind of excitement, such as has been seldom seen in a professed scientific organization, the Association, in the face of its own resolution passed the year before, under the sanction of which the work had been carried on declared void, the addition of thirty-four added to the original committee, and proceeded to appoint a new committee of thirty-eight with full power to undo the entire work of the previous committee. The new committee, in its organization, ejected the new coders from office and filled their places with old coders. Having decreed that the American members of the Congress must be members of the American Medical Association, or of societies affiliated with it, in other words, making the Congress a meeting of the American Association with a larger number than usual of invited guests, the plotters thought that they were at last victorious. They had shut out the new code men, in which number is included nearly all of the progressive and advanced thinkers in the profession, and proposed to play Hamlet at Washington in 1887 with Hamlet left out.

As if the scientists of the old world would care about turning aside from their great work to look at these old fossils posing upon the stage with the strut and garments of the dark ages! It is needless to say the majority of the medical profession, in all the leading cities, are leaving these plotters severely alone, and will have no part or parcel in the Congress under the present management. Hence there will be no Congress. Scientists from abroad will not care to take part in an organization which has been so disgraceful in its management and which insults them by its narrow restrictions.

The handful of old fossils which still cling to their old code may, by and by, learn that they are reaping, in the contempt of scientists everywhere, the reward of their tricks and their plots.

BIBLIOGRAPHICAL.

DISEASES OF THE TONGUE. By Henry C. Butlin, F.R.C.S., is the last of the small clinical manuals published by Lea Bros. & Co., Philadelphia, for practitioners and students in medicine. Dr. Butlin brings to his task a very large experience as one of the staff of St. Bartholomew's Hospital, together with a large private practice, and the friendly co-operation of brethren eminent in the profession who have furnished him with notes of cases. The various diseases of the tongue are treated pathologically, surgically and therapeutically with marked intelligence. The part devoted to the various forms of cancer of the tongue, illustrated with chromo-lithographs and engravings, will have a peculiar interest for the American profession at the present time.

BRAITHWAITE'S RETROSPECT OF PRACTICAL MEDICINE AND SURGERY keeps on the even tenor of its ways, furnishing a semi-annual epitome of the progress of the medicine throughout the world, such as could only be obtained elsewhere by an immense outlay of time and money. The American edition is issued, as in the past, by W. A. Townsend, N. Y.

A TREATISE ON THE SCIENCE AND PRACTICE OF MIDWIFERY. By W. S. Playfair, M.D., F.R.C.P., Physician-Accoucheur to H. I. and R. H. the Duchess of Edinburgh; Professor of Obstetric Medicine in King's College; Physician for the Diseases of Women and Children to King's College Hospital; Consulting Physician to the General Lying-In Hospital, and to the Evelina Hospital for Children; Late President of the Obstetrical Society of London; Examiner in Midwifery to the University of London and to the Royal College of Physicians. Fourth American, from the Fifth English, Edition, with Notes and Additions, by Robert P. Harris, M.D., with three plates and two hundred and one illustrations. Philadelphia: Lea Bros. & Co., 1885. Pp. 664.

This hand-book *par excellence*, which has reached a fifth edition, scarcely needs either introduction or recommendation, particularly to American readers, for it is already popular and familiar as a text book in our colleges.

The present edition shows the text to have been carefully revised, and the chapter on "Conception and Generation," mostly

rewritten to accord with recent advances in embryology, and several new illustrations have been added. The American editor has made such additions as the usages and experiences of this country warrant, such as those relating to the "form of decubitus for the application of the forceps; the models of instruments in use; the measure of fear of the Cesarean operation when based upon our more favorable results; the question of the use of stimulants for wet-nurses and convalescent parturient women, etc." In order to bring the work to the latest period, there have been added the new forms of Cesarean operation, the experiences with Hicks' method of treating placenta prævia, the latest American statistics in the Cesarean section and laparo-elytrotomy, the latest Porro statistics, etc. There are also articles on spondylolisthesis, the rational treatment of rupture of the uterus, etc. The whole appears in readable English, and belongs to that class of books which one can sit down and read through, without feeling the dryness of the subject.

The North American Review.—"Grant's Memorial: what shall it be?" is discussed in the September number of this excellent journal by Launt Thompson, Karl Gerhardt, O. L. Warner, and Wilson McDonald, sculptors; W. H. Beard, painter; Calvert Vaux and Henry Van Brunt, architects; and Clarence Cook, art critic. This symposium is sure to attract wide attention at this time, when the desire is so general to erect a monument to Grant that shall be worthy of the man, the nation, and American art. The same number of the Review contains a consideration of the question, "Shall our National Banking System be Abolished?" by George S. Boutwell, F. J. Scott, S. Dana Horton, and Edward H. G. Clark. "Ouida" contributes an essay on "The Tendencies of English Fiction," and Elizabeth Stuart Phelps writes on "The Great Psychological Opportunity." But the most readable article in the number is ex-Sergeant-at-Arms French's "Reminiscences of Famous Americans," which is a series of delightful anecdotes about the famous war senators. Mr. French is writing a book of these reminiscences. If it equals this forestallment in the Review, it will be one of the famous works of modern literature.

A SYSTEM OF MEDICINE BASED ON THE LAW OF HOMEO-PATHY. Edited by H. R. Arndt, M.D. In three Volumes. Vol. II. Philadelphia: Hahnemann Publishing House. F. E. Boericke, 1885.

The volume opens with a discussion of the diseases of the blood glandular system and is followed by those of the urinary and genital organs. The latter half of the book is devoted to diseases of the nervous system and the organs of locomotion. All the articles show wide research and excellent judgment in gathering together in a clear and distinct form the proven facts in pathology. A book like this can lay but little claim to actual originality, as it must of necessity be a collection of what seems to the authors the most advanced thoughts of the foremost members of the medical world upon the questions discussed. Added to this is the practical experience of the writers, of facts in pathology and therapeutics which they have verified in the sick room. It is fair to suppose that each remedy given is endorsed by the writer and is, in his belief, a belief founded on personal experience clearly indicated in precisely the conditions represented. If this is a fact, the work will grow into public favor and be received with strong commendation by men of all schools. It is hardly to be supposed that men with the reputation of the writers of these articles would be willing to repeat, parrot-like, statements without a personal verification. The work is elegantly printed and in

general appearance would be a credit to any publishing house. We reserve a more extended notice for the conclusion of the third and last volume.

DR. HENRY MINTON retires from the editorial chair of the *Homœopathic Journal of Obstetrics and Diseases of Women and Children*, and Dr. L. L. Danforth takes his place. The quarterly was founded by Dr. Minton, and has won a deserved success, which we have no doubt will be continued and increased under the new management.

Messrs. Gross & Delbridge, of Chicago, announce a second edition of Cowperthwaite's *Materia Medica*, greatly enlarged, as ready for issue.

OBITUARY.

J. SAVAGE DELAVAN, M.D.

WE have seldom been so startled and pained as on reading the brief telegraphic dispatch, in a morning paper, that Dr. J. Savage Delavan was drowned in Saranac Lake. For years Dr. Delavan had been accustomed to pass his summer vacations in the Adirondacks, and on the morning of the 7th of August was engaged in fishing, in company with his wife, and a guide who had been with him on these excursions for many years. Standing up to shoot at a hawk, the recoil of the gun threw him from his balance, and, in seeking to regain his position, upset the boat and all were plunged into the water. Mrs. Delavan owed her life to her having become entangled in the fishing tackle, which held her to the capsized boat, where she remained in the intensely cold water nine hours before she was rescued.

Dr. Delavan was but forty-five years of age at the time of his death, but he left a record of able and conscientious work such as is seldom crowded into a life of longer duration. He studied medicine in the office of Drs. H. D. Paine and J. W. Cox, of Albany, and was graduated from the Albany Medical School, in 1861, being the essayist of his class. Subsequent to his graduation he pursued special courses of study in Paris. Dr. Delavan held the position of surgeon in the U. S. Army in the civil war, a portion of the time being connected with the Harwood Hospital, in Washington. He participated in active service in all the battles before Petersburg during the last year of the war, and was present at the surrender of Fort Fisher. He was one of the first to receive the appointment of Pension Examining Surgeon, which he held for two years. After a four years' sojourn in Switzerland, one year of which he acted as Vice-Consul, he returned to Albany, and entered into active practice. His intelligent, energetic work as one of the Commissioners of the State Board of Health, to which he was twice appointed by the Governor, is too well known, through his public labors and his scholarly and scientific papers, many of which were published in this journal, to be recapitulated here. Of a generous, unselfish nature, thoroughly honest and painstaking in his work, with broad, liberal views and rare intellectual culture, he was a brilliant leader among the advanced thinkers in the great field of medical truth.

—One and a half grains of tannin will neutralize the bitterness, without changing the action, of ten grains of quinine. The intense bitterness of the drug renders it almost impossible to administer it to children in its natural state.

CORRESPONDENCE.

OUR LONDON LETTER.

MESSRS. EDITORS: The collapse of the scheme for holding the International Medical Congress of 1887 on your side of the Atlantic is the general theme of conversation here, and it is not disguised that the Code question is the cause of the calamity. The regret is great and universal; but it is felt that no invitation coming from a *section* only of the medical profession in America could be accepted. It is somewhat amusing to see the medical press of this country favorably comparing the British Medical Association with the American Medical Association, and, patting the former on the back, saying, "What a good, liberal, tolerant, discreet Association it is!" "An Association," says the *Medical Times*, "which can tolerate homœopaths upon its roll contrasts very favorably, in respect of discretion and liberal feeling, with one which, like the American Association, ostracizes regular practitioners, simply proclaiming the individual liberty of holding consultations with whom they please." I like that "liberal feeling!" If the British Medical Association had only possessed the legal power, it would have very effectually dissembled its "liberal feeling" and have ostracized homœopaths and those who consult with them long ago. As it is, it takes most elaborate precautions to keep honest homœopaths out, though it gives hearty welcome to all who practice it and say they do not. But it is well to make a virtue of necessity where virtue is scarce. I hope the American Medical Association will enjoy the comparison.

Cardiff has this year been the scene of the annual meeting of the discreet, liberal-minded and enlightened Association of British Medicals. There was the usual round of addresses, cram full of stale platitudes, followed by votes of thanks to the "orators." The address in "Therapeutics" was delivered by Dr. Roberts, of Manchester, who seems to think that the chief thing in the art of healing is dietetics, and that very few medical men know anything about it. Dr. Wilks, on the other hand, had an idea that therapeutics had some connection with drugs. From his standpoint he was no doubt right when he said: "It is not so much new remedies, but a better indication and knowledge of how and where to use them that is required." That is precisely what Hahnemann and his followers have been trying to teach allopathists all these years; but they are so monstrous dull.

Dr. Lauder Brunton has brought out a "Text-Book of Pharmacology, Therapeutics and Materia Medica." This is a great work in point of size, and all the medical journals say it marks a new epoch in medicine. If so, it is a very unfortunate epoch. If any one is interested to know the action of drugs on frogs' hearts cut out of their bodies, on the nerves, muscles and skins of frogs, cats, dogs and rabbits, on various hypothetical "centres," he may find interesting reading in Dr. Brunton's work. But if any one wishes to know how to cure patients, he had better go elsewhere. By "pharmacology" Dr. Brunton appears to understand experiments on drugged animals, despairing of being able to understand the action of drugs on the healthy human organism. He dismisses homœopathy in three-quarters of a page; and in his estimate of the system leaves disease out of account. It seems as if allopaths could not ask themselves the straightforward question: "Does a drug act on the sick differently from what it does on the healthy? and if there is a difference, what is it? It is most unscientific to take for granted, as Dr. Brunton does, that the action of a drug must be the same under both conditions.

Ferran's wind-bag has collapsed. Spain, which produced him, does not yet quite know whether to hang him or ennoble him, but in the world of science his reputation is dead. He keeps his method of "cultivating" a secret, and some of his specimens that have been examined microscopically have shown that he neglects the most ordinary precautions in microbe-culture. What he called a bunch of spores turned out to be a "junk" of uric acid! His greatest achievement appears to have been the slaughter of a number of nuns—47 some accounts say. When this triumph was communicated to the French Academy of Science, M. Pasteur was greatly excited, not to say pleased. "If he has killed that many," exclaimed the great man of science, "he has got the virus; its power fails because he doesn't know how to manage it. Let him send some to Paris and in eight days it will be converted into a harmless vaccine." On the "harmlessness" of M. Pasteur's "vaccine" we had better take the report of Drs. Koch and Klein. According to these authorities they are "harmless"—except that they will kill a large percentage of the inoculated.

China offers a splendid field for homœopathic practitioners. Dr. Barchet, of Ningpo, has made a grand success, one of the public institutions having been lately put under his care. During his year of office the mortality was *nil*, such a thing having never occurred in any previous year. A missionary, at present in England, who is well acquainted with homœopathic practice, tells me that the system makes rapid progress wherever it is established. In the part of the country where he labors he can go anywhere without any cost to himself, purely on the strength of his knowledge of aconite and belladonna in the treatment of eyes. The people welcome him gladly and come in numbers to be treated. There is a great opening for a practitioner in Shanghai.

The annual meeting of the homœopathic practitioners of Great Britain takes place this year at Norwich, on the last Friday in September. Probably we shall have something to talk about besides "diets"; and if Dr. Wilks should care to be present, he may learn "a better indication and knowledge of how and where to use" remedies than he and his friends now possess.

Yours Fraternally,

JOHN H. CLARKE, M.D.

15 St. George's Terrace,
Gloucester Road, S. W., August, 1885.

DR. COWL'S CRITICISMS.

To the Editors of the *N. Y. Medical Times*:

IF Dr. Cowl will study fibrin a little, before he ventures further criticisms of the *facts* I have given upon the subject, he will save himself no little humiliation in the near future. Facts live, but fallacies die, and more speedily than they used to, even if they are now, as ever, bolstered up by great numbers of men who are just as ignorant of nature as it is, as are the propounders of the fallacies. This we see in the great bacteria fallacy, which is rapidly nearing, if it has not already reached, its death throes, as do two-thirds or more of all the cholera victims treated according to its errors.

Dr. Cowl's ignorance of fibrin has already led him to make several statements concerning it which are not only not true as facts in science, but there is not even a seeming of truth as a basis for his assertions.

Yours truly,

R. R. GREGG, M.D.

BUFFALO, N. Y., July, 1885.

TRANSLATIONS, GLEANINGS, ETC.

THE NEUROSES OF THE GENITO-URINARY ORGANS.

BY PROF. ROBERT ULTMANN, OF VIENNA.

Translated from the German by W. Storm White, M. D.

SIXTH ARTICLE—(Conclusion).

SEXUAL excesses and onanism are the most frequent causes of pollutions and spermatorrhœa. Sexual excesses produce prolonged erections, and each erection is accompanied by a swelling up of the caput gallinaginis, and by these too-frequent and too-long-lasting swellings of the pars prostatica, a catarrhal condition of the caput and a strong hyperæmia with hyperæsthesia of the pars prostatica urethræ becomes developed, which, by reflex action, will sometimes cause pollutions and at others spermatorrhœa. The proof that we have to deal with a catarrhal condition in the caput gallinaginis is found in the fibres composed of pus corpuscles, epithelium and spermatozoa, which we sometimes see floating around in the urine of patients suffering from pollutions. If a sound is passed in such a case, the patient cries aloud with pain because of the sensitiveness of the pars prostatica. If the mucosa of this part is examined with the endoscope, it is found to be dark cherry-red, swollen, partially deprived of epithelium, and to bleed easily. Other inflammations of the prostate also produce these same complaints.

Pollutions are especially apt to occur in chronic gonorrhœas, followed by inflammation of the seminal vesicles, where they have never appeared before. Spermatozoa can almost always be found in the sediment in chronic prostatitis and hypertrophy of the prostate, proving that the sphincter of the ductus ejaculatorius has been made insufficient by the inflammatory process or by the growth of the gland.

Diseases of the central nervous system are sometimes accompanied by pollutions and at others by spermatorrhœa, and the pollutions are very frequently caused by a contracted foreskin—a phimosis. I have often cured both pollutions and impotence arising from this cause by simply operating for the phimosis. A nervous condition rarely produces spermatorrhœa, yet a very intractable form of the disease arises when this cause is united with sexual excesses and onanism.

The flow of seminal fluid must always be ascertained by the microscope, and the presence of spermatozoa naturally plays an important rôle. In azoospermia, on the contrary, which is frequently associated with spermatorrhœa and pollutions, this will not be sufficient. We take a drop of such fluid on a slide, cover it over with a cover-glass, and put it aside for several hours, and then examine it for the characteristic forms (the sperma crystals).

A patient is suffering from spermatorrhœa when the microscope reveals spermatozoa constantly or frequently in the sediment of the urine, or large quantities of sperma are discharged on urination or after stool, or, as is frequently the case, we are able to squeeze a drop of whitish fluid containing spermatozoa from the glans penis.

If the examinations give negative results, and copious discharges of semen only occur occasionally, he is suffering from pollutions.

Mixed forms are not unfrequently found, yet the symptoms of one or the other condition usually prevail, so that it will not be difficult to make the differentiation.

If the pollutions occur very frequently, the most varied forms of general disturbance make their appearance, associ-

ated with symptoms of irritability of the whole nervous system, while in the pure forms of spermatorrhœa, the symptoms of depression, of melancholia, and of impotence come to the front.

Patients who suffer from frequent pollutions usually complain of vertigo and of preoccupation of the mind, particularly in the morning, after the discharges, which render them totally unfit for any mental work. There is also sometimes a drawing pain at the base of the brain. They show such a reflex irritability that they are entirely overcome by any sudden surprise, the color of the face constantly changes, the eyes roll about in speaking to you, and in aggravated cases the irritability may be so great that speech itself becomes affected, and the voice fails entirely in trying to say certain words. Frequently there is oppression in breathing and nervous palpitation of the heart. When the patient is told to disrobe, we observe that the naked surface will present continual, yet slight, muscular tremors.

In spermatorrhœa it is not unfrequently found that the testicles and the skin covering the external genitals are much less sensitive to electricity than in the normal condition, although the urethra is very hyperæsthetic.

The therapeutics in both of these forms is sometimes general, and at others local, but first of all, the patient must adopt a perfectly regular mode of living, sexual excitements and onanism must be avoided, and all strenuous bodily and mental work must be stopped, at least temporarily. Sea or land journeys, in connection with fresh water or sea bathing and employment of a milk or cold water cure, are particularly to be recommended. The diet must be of easily digested foods, and not be irritating. Sausages, strong drinks, and strong tea or coffee are not to be used, and it is advisable to give the food often and a little at a time. This is especially to be observed before going to bed, when but little should be taken into the stomach, in order that the stomach, intestines and bladder may not become too full.

Sleep should not be too long, and he should get up early in the morning; the bed should have a comparatively hard mattress and bolster, stuffed with horse hair, and the bed clothing should never be heavy and heating, and the patient should never lie on his back, as in that position, the intestines, containing more or less solids, press upon the efferent blood vessels and thereby increase the hyperæmia in the pars prostatica. The increased hyperæmia also increases the hyperæsthesia of the parts, and a very slight irritation (such as that of heavy bed-clothing, the movements of the hands, etc.,) will be sufficient to cause reflex contractions in the seminal vesicles, i. e., pollutions.

Quinine and iron may be used as tonics when there are symptoms of weakness and anæmia. I have not seen much effects from camphor and lupulin, or from extr. belladonnæ or valeriana. Bromide of potash (bromkalium) gives excellent results, but it must be given in large doses, from 3 to 4 grammes daily, dissolved in a large quantity of milk or sugar water. Sometimes good service will be done by extr. secalis cornut., especially in spermatorrhœa, where at least 0.5 gramme must be taken every day.

According to Benedikt and Schulz, the electrical treatment should be with the constant current, and lasts usually from 6 to 10 weeks, each sitting being for from 2 to 3 minutes, repeated 4 to 6 times a week. The weakest possible current must be employed, the copper pole being applied at the small of the back, and the zinc one to be repeatedly rubbed over the region of the vas deferens, penis, and mons veneris. By this proceeding we counteract the abnormal irritability of the medulla spinalis.

Local treatment, however, is the best, as we can very well understand when we consider that most cases of this kind originate from sexual excesses or onanism, which have produced changes in the pars prostatica, which in their turn cause reflex pollutions and spermatorrhœa.

In many cases the use of thick metal sounds is beneficial, and the introduction should be made once a day, or at least once every other day, with the patient in a horizontal position, leaving the instrument in the bladder five minutes, and gradually increasing the time up to thirty. We should always choose the thickest sound that will pass into the orificium urethre, and Nos. 20-26 of Charrier's scale are generally employed. These sounds exert an influence upon the parts both because of their weight and of the pressure which they bring to bear. If marked hyperemia is present, we can begin with the introduction of bougies, and for this purpose, Pitha gives preference to those made of wax.

The cold sound (called the psychrophor by Winternitz) works in the same manner, or sometimes even better, than the above. It consists of a closed metallic catheter, divided into two passages by a longitudinal partition, one for the ingress and the other for the egress of the water. There is a short arm or branch from the upper extremity of each of these, to which is fastened a rubber tube. The one connected with the afferent tube leads to a vessel containing cold water, which is placed higher than the patient, while the one connected with the efferent tube empties into a vessel at the foot of the bed. A little suction on the efferent tube will cause the water to flow through the double sound, and thus keeps it at an even degree of cold. Here we have both pressure and cold acting upon the pars prostatica of the urethra. The temperature of the water may be varied, and we usually commence with it at 16 to 18° R. and gradually go lower till we reach that of spring-water. I have frequently observed that very cold water will not be borne by cases which improve when it is used after standing a little while, until it has become more nearly of the same temperature of the room. The sittings are gradually increased from 5 to 30 minutes—but the treatment must cease for a few days, should any symptoms of catarrh of the bladder make their appearance.

Astringents also act beneficially, if they are brought into the pars prostatica, and this can be accomplished either in the liquid form or as suppositories, by means of Dittel's porte-remède, and in the fluid state they can be easily introduced with my short injection catheter, used in the same manner as described further back. If we wish to produce a more lasting and powerful impression on the urethra, we must make use of Dittel's instrument and urethral suppositories.

Dittel's porte-remède consists of a short silver catheter, which is cut off somewhat obliquely and slightly curved at its lower extremity, and a closed silver obturator having an olive shaped point at its lower extremity, which exactly fits the lumen of the catheter, and which can be fastened immovably in position by means of the catch slot at the top.

I use small suppositories of tannin and cacao butter, or of nitrate of silver and cacao butter, (R Tannin. puri 0.5—Butyr. de cacao q. s. f., suppositoria form. gran. hordei, No. quinque; or argent. nitr. 0.05—Butyr. de cacao q. s. f., suppositoria form. gran. hordei, No. quinque.)

The patient is placed in a horizontal position, and the instrument is gently introduced, its position being ascertained by means of the index finger of the left hand, which is introduced into the rectum. When the pars prostatica has been reached, the obturator is removed and the suppository shoved into position. By means of this catheter, we can apply a given amount of medicine directly to the pars prostatica. If

we wish to cauterize the caput gallinaginis, we proceed in exactly the same manner, only using the nitrate of silver twice as strong. After the suppository has been introduced, the patient should remain lying for a quarter of an hour, during which time it has been dissolved in the pars prostatica, and has therefore accomplished its purpose. After this he should be put to bed.

A few minutes after cauterization with strong nitrate of silver, the patient feels an excessive desire to urinate and a sticking pain in the neck of the bladder. After a few hours, or sometimes not till the next day, a greater or less hemorrhage from the urethra makes its appearance. The urethra is very sensitive and urination difficult and painful. The patient lies in bed in a horizontal position, and if the bleeding is very excessive we must apply cold compresses on the perineum. After two or three days, the painfulness and the desire for micturition passes off, and with the exception of a slight discharge from the urethra which may last two days longer, he feels quite well. I have seen retention of urine, excessive hemorrhage, and other disagreeable symptoms follow the application of the caustic, and therefore I never undertake its use unless the patient can lie in bed from two to five days after its use. When the urethra is very sensitive, I only use half a dose, that is half a suppository, at the first application, and if this is well borne, I afterwards apply a whole one. We must usually make from two to three applications, and this can be done once or, at the most, twice a week. Although I have had such good results while using Lallemand's method, still I prefer this treatment with Dittel's instrument, because, as has already been said, we can apply a certain quantity of nitrate of silver to the pars prostatica.

In an advanced spermatorrhœa, when pollutions are seldom or not at all present, we may try faradization through the rectum, in the same manner as has been described in speaking of enuresis. An improvement is sometimes to be observed, inasmuch as there is a return of sexual desire, erections occur, and the passage of both urine and feces is followed by the escape of semen, and finally nightly pollutions make their appearance. Trousseau constructed his compressor prostate for the cure of spermatorrhœa, having as the basis of his treatment the idea that the whole condition was caused by a dilated state of the duct, ejaculatorius. On one end of this instrument is an olive shaped bulb, from the size of a pigeon's egg to that of a hen, while the other becomes smaller, and has attached to it a transverse bar. It is made of hard rubber, is perforated for the free escape of flatus, and is held in position by a "T" bandage. The somewhat flattened, olive-shaped bulb presses on the dilated and relaxed ductus, when it is introduced into the rectum, thereby pressing it together and leading to the cure of the spermatorrhœa (i.e., theoretically), but this instrument is generally very badly borne by patients, and its operation is usually anything but sufficient.

Operative measures must be used when the pollutions are caused by the presence of phimosis, varicocele, calculus, and diseased conditions in the rectum.

(c) THE SECRETORY NEUROSES.—Finally, the neuroses of the urinary and genital organs are so frequently associated with the above described motor and sensory neuroses that they are usually first observed as occurring secondary to them, and are seldom seen as an independent form of disease, and as most of them have been described in speaking of the individual motor or sensory neuroses, we will confine ourselves to the description of a single form of secretory neurosis in the following.

(a) The secretory neuroses of the urinary organs are confined to anomalies of secretion in the kidneys, as the organs

which are concerned in the excretion of the urine. We recognize these anomalies by means of the examination of the urine, as has been described in the introduction, in speaking of the "urine." We sometimes see a polyuria (urina spastica), sometimes an anuria (anuria hysterica), the excretion of an alkaline or neutral urine without the presence of a vesical catarrh, the appearance of a cloud of earthy phosphates by heating (phosphaturia, Teissier), an increased amount of indican (glaucuria, Kletzniski), and sometimes the temporary presence of sugar and albumen.

(b) The neuroses of the genital organs sometimes appear under the form of polyspermia, sometimes as aspermatia, as was seen under the heading "sperma" and the neuroses of the glands and urethra remain to be described.

Long before the ejaculation of the semen, in every sexual excitement as soon as the penis becomes stiff, a clear, transparent, gelatinous drop of fluid appears at the external meatus of the urethra. This drop represents the secretions of the prostate, Cowper's glands, and Littre's glands, and as the prostate is the largest of these, it is apparent that the principal part of the secretion must be made up of the secretion of that structure. The purpose of this fluid seems to be to make the urethra more slippery for the passage of the seminal fluid, which is more consistent than the urine, and to thereby make its exit easier.

Now, if it becomes apparent that a larger amount of this semi-fluid than normal is constantly being secreted, the condition is recognized as prostatorrhœa, and this was first accurately described by Gross, who ascribed its appearance to sub-acute and chronic prostatitis. The prostatorrhœa may be temporary or permanent. It is often found in a lighter grade after gonorrhœa, where the yellowish drops gradually become white and flocculent and finally transparent, watery, and slightly sticky, the patient generally stating that the gonorrhœa had altogether disappeared, there remaining only a certain "moisture," and that a drop of the fluid could be pressed from the urethra, especially when the meatus is held open. This hypersecretion urethralis does not always remain so slight, but sometimes becomes so copious that the shirt is continually moist, as it would be in the course of an acute gonorrhœa.

The cause of prostatorrhœa is to be sought either in onanism, in sexual excesses, or in gonorrhœa, the latter of which is the most frequent. Of course, there are other causes producing this condition, such as those which will produce an irritation in the region of the neck of the bladder or prostate, vesical calculi, diseases of the rectum, etc.; still, the greater number of, and the most pronounced, cases of prostatorrhœa can be traced directly to a gonorrhœa, especially if this was followed by prostatitis, or cystitis and epididymitis. If the chronic prostatitis is accompanied by a thickening and enlargement of its lobules, or a hypertrophy of the whole organ, we will also observe a hypersecretion, where fluid will flow from the urethra, but this is no longer clear and transparent, being full of cellular elements (pus corpuscles and epithelium from the prostate), is turbid, milky, and somewhat flocculent (milchende prostata).

The diagnosis is made by means of the microscopic examination of this fluid. If the colorless or whitish drop contains spermatozoa, spermatorrhœa, and not prostatorrhœa, is present. If we find no spermatozoa, the fluid may originate from azoospermia or from prostatorrhœa, and to differentiate these we allow a drop to evaporate slowly on a glass slide, or if there is sufficient fluid, permit the sediment to become deposited, afterwards examining this sediment. If we find the sperma crystals (characteristic of the contents of the seminal vesicles), we may safely assume that the case is one

of azoospermia, while, if we only find the characteristic crystals of sodium chloride, it has originated as a secretion of the prostate. We may sometimes find the concentrically layered corpora amylacea, which point directly to the prostate. Usually there are only a few cellular elements to be seen, which may be cylindrical epithelia or mucus corpuscles.

The introduction of the sound usually shows great sensitiveness of the pars prostatica, and nothing abnormal is discovered in the examination with the index finger in the rectum. Yet we sometimes find the remains of a prostatitis, in the form of hard places, depressions, asymmetry of the lobes, etc., of the prostate. The urine is clear, and usually shows a cloudiness on heating, from the phosphates.

In prostatorrhœa, the prognosis is favorable, yet, as in most of the neuroses of the genital and urinary organs, the time of treatment till complete cure cannot be given with any degree of certainty.

The therapeutics are the same as have been given for spermatorrhœa, and there remains only the hint to be given that the faradization of the prostate through the rectum has shown excellent results. The local treatment is the best, especially the use of astringents in solutions injected with a short urethral catheter. However, if this method of treatment does not succeed, the cauterization of the pars prostatica with Dittel's porte-remède will be indicated.

GLONOINE IN ACUTE MANIA.—Three cases of acute mania treated with glonoine are detailed by Dr. Walter Wesselhœft, in *Publ. Mass. Hom. Med. Society*, for 1884.

All were young, unmarried women, in the family of one of whom cases of insanity had occurred on both the father's and the mother's side; another had lost two brothers by phthisis, and was herself far advanced in the disease; while the third, "a gifted artist," had suffered from a severe disappointment, which was the starting-point of her mental disorder.

The symptoms in the first case which, after the ineffectual trial of several other remedies, finally led to the selection of glonoine, are described as follows: Partial unconsciousness, with a perverted mental state, or prolonged cerebral congestion; flushing of the face, alternating with pallor; evident pain in the head, back, and shoulders, raising the hand to the head; marked pulsation of the carotid, and hardening of the temporal arteries; increase of pain and distress on being moved; injection of eyes, dilatation of pupils; starting, sleeplessness, dozing with sudden awakening; deathly coldness of extremities; variable and rapid pulse; loud, stertorous breathing; thickly-coated and swollen tongue; suppression of menses, all constituting a picture which will not only be recognized as possessing the striking features of the glonoine pathogenesis, but also those divisions of an acute form of mania of by no means unusual occurrence.

As the patient kept her jaws firmly closed, the medicine was at first administered by inhalation—six drops of the second decimal dilution (the strength employed in all the cases) being mixed in six tablespoonfuls of water, and part of this evaporated from time to time before her face. In about an hour, however, a quarter of a teaspoonful, or more could be given, by the mouth, at intervals of twenty minutes.

After the third dose, a marked change took place; there was evident relaxation of the general tension; the unevenness of the pulse was gone, and a copious and warm perspiration covered the face and trunk. Lucidity of mind did not return until the following day—but from this time forward, improvement continued steadily, though slowly, and the patient has since resumed her wonted avocations, although still subject to some disturbance of mind during the catamenia.

In the second case—that which was complicated with consumption—the mental symptoms had been preceded by a high degree of religious excitement. Here, again, there were all the signs of excessive cerebral irritation, ordinarily called blood-pressure, with arterial tension, throbbing carotids, prominent temporals; the pulse hard and cordlike, high, variable, and with it all a marked distension of the abdomen, and loose, involuntary fecal discharges and quantities of flatus. Lachesis, stramonium, hyoscyamus, etc., were of no avail. Finally, glonoine was given, twenty drops in ten tablespoonfuls of water and a tablespoonful of this every hour. In three hours signs of general relief were apparent, the distressing symptoms gradually subsided, and the pulse became slower and softer. Next day, improvement seemed to be established, and at the end of three weeks (with no other remedies than sulphur and zinc) there existed a condition so favorable as to warrant the highest hopes of final recovery. All went well for about two months, after which, the phthisical symptoms becoming aggravated, the patient fell again into mental weakness, and sank rapidly until her death.

The third patient became subject to attacks of acute delirium more especially at the menstrual period. She was found by the doctor in bed, talking wildly and incoherently, singing, laughing, shouting, pounding the pillows, and generally doing what she could to cause those about her annoyance and alarm. The eyes were wild and injected; the face flushed; hands and feet cold; tongue thickly coated, flabby and moist; breath very offensive; pulse rapid and full. She had complained much of headache, and now was silent, from time to time pressing her head as if in pain. She persistently refused to take medicine, violently resisting all attempts to administer it; but since she drank water, or filled her mouth with it, holding it there for a long time, or spitting it on the bed or at those about her, a glass with glonoine was placed within her reach, and she was induced to drink of it. This was near midnight. In less than an hour she had become quiet, had submitted to taking the medicine with a spoon, and soon fell into a sound sleep, from which she awoke about 4 A. M., confused, silent and depressed, but slept again after daylight, and was so far recovered at noon that she took food voluntarily and well. At the end of two days she was again at work in her studio, though much against the doctor's wishes.

At the two following menstrual periods, the attacks of delirium were repeated, and were characterized as before by great excitement and vehement actions. In every instance, soon after glonoine could be given (either by force, persuasion, or artifice), the abatement of the symptoms was marked. The attacks after a while became so slight and transient (always coming directly after the period), that no aid was called in, but, ere many months had elapsed, the patient was, by an unforeseen and unavoidable accident, most forcibly and painfully reminded of her disappointment of the year before, with the result of renewing the mental perturbation in a more serious form than before. The sleeplessness, obstinacy, and impulses to commit wrong acts, were present again; but she was silent, melancholy, dull, and free from all signs of arterial pressure and excitement, the pulse remaining slow, or near the normal. Here glonoine proved of no avail.

The reporter mentions, in addition, that he has given glonoine with advantage in cases of sick headache.

BOMBASTES FURIOSO.—Ferran, who has gained a very evanescent reputation from cholera inoculation, says, "The two greatest men that humanity has produced are Christ, who has given us moral redemption, and Pasteur, who has given us the laws which can lead to our physical redemption."

NITRO-GLYCERINE.—The French Academy of Medicine have awarded a prize to Dr. Murrell "for the discovery of nitro-glycerine as a remedy for angina pectoris." According to the *Medical Times*; or, as the *British Medical Journal* puts it "for his work on nitro-glycerine as a remedy for angina pectoris." This announcement is to us not a little amusing. About the time Dr. Murrell was learning to walk—if, indeed, his evolution had advanced thus far—Constantine Hering was taking infinite pains to procure the then rare explosive; and when he had succeeded, risking his health in proving the compound on his own person. About the same time, or a little subsequently, Dr. Dudgeon conducted a very thorough proving with the same drug. As the result of their experiments the value of nitro-glycerine as a medicine became established and its place defined. In the year 1880 Dr. Murrell published a volume on his "discovery" of the medicinal properties of nitro-glycerine; and in the year 1885 the French Academy of Medicine "discovers" this "discoverer," and awards him one of its chief prizes. Of Constantine Hering, who gave the drug the name by which it is now generally known—glonoine—and of Dr. Dudgeon, the learned Frenchmen probably know nothing. Perhaps Dr. Murrell will enlighten them.—*Homeopathic World*.

ETHER DOUCHE AND ELECTRICITY.—The danger of using the ether douche and electricity at the same time, revealed itself to Dr. C. H. Hughes in an accident which happened to one of his patients recently, and which he relates in the *N. E. Medical Monthly*. The patient was being treated for a cerebro-spinal trouble, and had received a descending fronto-cervical constant current and a liberal douche of sulphuric ether to the top of the head. The patient was immediately thereafter conducted to the static insulated stool, and as the roller was applied up and down the spine, the ether on the head ignited. The patient had on a wig which caught fire, but the fire was promptly suppressed—though it for a moment blazed up brightly—by clapping hands on the burning head and smothering the flame. The precaution to be deduced is to never apply ether until after the use of the static battery, when the latter and the former are both indicated.

EUCALYPTUS.—A writer in *Pacific Medical and Surgical Journal* says of the effects of the fluid extract of eucalyptus globulus, after an experience of eight months in its use in the Marine Hospital, that he regards it as a diuretic of rare virtue, capable of being administered when other diuretics in common use are inadmissible. It is an aromatic tonic, and has notable restorative effects in low states of the system, as typhoid fever, typhoid diarrhoea and dysentery. In vesical catarrh its action is very valuable. As an external application in chronic ulcers it has great value.

SURGICAL TREATMENT OF GALL-STONES.—Mr. Lawson Tait recently suggested the crushing of gall stones by grasping the duct with the forceps. He writes to the *British Medical Journal*: "I have carried my proposal out, and crushed the stone with great ease by two strokes of the forceps. It was about the size of a cherry, and after it was broken the fragments dispersed, and they have given no trouble at all. Since the operation, only a very small quantity of mucus fluid, faintly tinged with bile, has come through the fistula, and the patient's motions are now quite normal in color. I shall close the fistula in a few days, and then will end all I have to say on this interesting subject."

OUR CHILDREN'S EYES.—When our children get near-sighted the mischief is not done principally in the schools, but at home. How many houses afford the children as well lighted rooms as their school rooms? The rooms of the rich are dimmed by curtains and shades, and the rooms of the poor are dark for want of large windows, or because they are situated in basements or narrow alleys. How many children have a suitable desk and chair at home? How many parents take care that their children do not read or write with the light falling on the book from the wrong side, or in the evening seated too far away from the gas light? And how many books the children read at home can compare typographically with their school books? As our statistics show, only seven out of twenty-three books, and only one out of ten periodicals! But if the prolonged application of the eyes of children is the chief cause of making eyes so disposed near-sighted, upon which books do our children fix their eyes more steadily, more attentively and more uninterruptedly? On the school books which they are obliged to read, or on the story books which they read for pleasure? Which, consequently, are likely to do the more harm to their eyes, the bold letters of the "Fourth Reader," or the blurred nonpareil of the "Arabian Nights;" the clear breviter type of "Shaw's History of English Literature," or the fascinating stories of the "Waverly Magazine" with its agate type?

When we look at a child deeply absorbed in a story book; when we see how the little face gradually approaches and almost touches the page; and when we think of the enormous muscular strain these young eyes have to endure, in order to read the miserable print, then we shall know better at whose door we have to lay the responsibility for the impaired eyesight of so many children. Let parents understand that the hygienic principles they are so anxious to see observed at the schools must just as strictly be enforced in their own house. Let them adopt the typographical standard of the school books for all the other books their children may read, and there will be no place for penny papers, dime libraries and all the rest of the so-called cheap literature. It is the dearest sort of matter people can buy for their children; it is a penny-wise-and-pound-foolish domestic policy; they are saving the pennies but wasting that which, once lost, no money in the world can restore, perfect eyesight.—HOTZ, *Chicago Med. Jour. & Ex.*, July, 1884.

PEROXIDE OF HYDROGEN.—This agent has been known and used in the arts for some time, and has also been used in medicine chiefly for its antiseptic properties, as it is one of the most potent destroyers of bacterial life. Its action on pus is remarkable. If a few drops of a ten-per-cent. solution be brought into contact with pus a brisk effervescence ensues, begins and continues until all the pus is completely destroyed. Its chief therapeutic value lies in its cleansing, antiseptic, and painless action upon foul ulcers. It is also useful in purulent ophthalmia, otorrhœa, gonorrhœa, etc., and as a mouth wash or gargle; it may also be mixed with glycerine and applied on absorbent cotton to the ulcerated cervix uteri. The account given of it is most flattering.—*Medical Era*.

HARD ON THE DOCTORS.—Many years ago, when the physicians, if they dissected at all, were obliged to steal the bodies, over the mutilated remains of a little girl was placed the following epitaph:

Her body dissected by fiendish hands,
Her bones anatomized;
Her soul, we trust, has risen to God,
Where few physicians rise.

SALISBURY STEAK AND TREATMENT.—The Salisbury steak is made by taking the best slices of the "round" of the beef, and chopping it with *dull* knives. The object is not to cut, but rather pound the meat. By thus treating it, the pulp comes to the top, and the tough, fibrous portion remains below. This pulp is scraped off and made into cakes, like sausage-cakes, or in the shape like a good sized steak and gently broiled on a gridiron. It has been found that meat gently cooked is more digestible than raw. The fire must be good, so that the meat may be rapidly broiled—that is, be cooked on the outside and almost raw inside.

A little salt and pepper and a small amount of butter added make a not at all unpalatable dish, and one which contains *all* the strength of the beef, with the tough, indigestible portion entirely separated. This diet is used exclusively in chronic cases, by physicians professing to treat according to the Salisbury method. They use but few drugs, and what they use are mainly tonics. The diet is used not only in diseased digestion, but diseases of liver, kidneys, stomach, bowels, nerves, etc., and remarkable results are said to have been obtained.

PEPTONIZATION.—An observation has been communicated by M. Marcona (*Lancet*) to the Academy of Sciences, suggestive of what may prove a valuable process for the conversion of albuminoids into peptones (partly digested foods). If a small quantity of the fresh sap of certain plants—the agave, for example—be added to chopped meat first covered with water, and the mixture kept at a temperature of 30° to 40° C., an active fermentation is immediately set up, with evolution of inodorous gases. At the end of thirty-six hours the fibrin has disappeared, and a liquid is left containing peptone equal in weight, when dried in a stove, to one-fifth the fresh meat used. This fermentation appears to M. Marcona to be due to the vital action of micro-organisms, and to resemble the peptonization of the gluten of flour by a bacterium, which is said to take place in bread-making. A large number of other fruits and juices are stated to be endowed with properties similar to those possessed by the sap of the agave. M. Marcona is of opinion that the new method of peptonization will afford a simple and economic means of preparing pure peptone quickly and at a low price, and suggests that it might be applied upon a large scale, so as to allow of the export of meat from South America in a form more nutritious and economical [and digestible] than the extracts.

CANNED FOODS.—Dr. John D. Johnson formulates the following rules (*Boston Medical Journal*) for determining the safety of canned goods used as food: 1. Every cap should be examined, and if two holes are found in it, send the can at once to the Health Board, with the contents, and name of the grocer who sold it. 2. Reject every article of canned food that does not show the line of rosin around the edge of the solder of the cap, the same as is seen on the seam at the side of the can. 3. Reject every can that does not have the name of the manufacturer or firm upon it, as well as the name of the company and the town where manufactured; "standards" have all this. When the wholesale dealer is ashamed to have his name on the goods, fight shy of him. 4. Press up the bottom of the can; if decomposition is commencing, the tin will rattle the same as the bottom of the oiler of your sewing machine does. If the goods are sound it will be solid, and there will be no rattle to the tin. 5. Reject every can that shows any rust around the cap on the inside of the head of the can.

LIFE-SAVING FROM DROWNING BY SELF-INFLATION.—(Henry R. Sylvester, M.D.) The intention of the proposed operation is to cause the skin of the neck and upper part of the chest to be sufficiently distended with air to support the weight of the body when immersed—the inflation being effected by the person himself by means of his lungs without the intervention of appliances. The operation consists in making a small puncture—not larger, for instance, than would allow the passage of an ordinary blow pipe—in the mucous membrane in the inside of the mouth, the object being to open a communication for the passage of air from the cavity of the mouth into the subcutaneous spaces of the neck. The situation chosen for the puncture is in the angle formed between the gum of the lower jaw and the side of the under lip or cheek, about opposite the first molar tooth of the lower jaw. The point of the instrument perforating should be passed down a short distance between the skin of the side of the face and the superficial fascia of the neck, its point being guided by the finger placed on the outside of the face and neck, taking care not to puncture either the skin or the superficial fascia. This having been done, and the instrument removed, in order to inflate the skin of the neck and chest, the patient should close the mouth and nose, and make a succession of forcible expiratory efforts, when the air contained in the cavity of the mouth will pass freely into the subcutaneous tissue of the neck. These expiratory efforts, inspiration being effected through the nostrils, should be continued until the skin is fully distended with air, which will pass readily to both sides of the neck and down the chest as far as the nipples; and this is all that is required to render the body buoyant in water. Should it so happen that the superficial fascia has been punctured and the air pass beneath it, the only difference in effect would be that the extent of air would be limited by the attachments of that membrane to the clavicle below and the border of the jaw above. The amount of air which the skin of the average neck is capable of holding without undue distension has been measured, and found to be enough to support ten pounds, and this is found to be amply sufficient to support the body immersed in water. The time required for inflation is found to be less than three minutes. The neck may be kept in an inflated condition by closing the puncture by pressure on the outside of the cheek by the finger, or by keeping the mouth distended with air; and when required the air may be immediately discharged from the neck by allowing the puncture to remain open, or by suction. The advantage may be summed up as follows: 1. The proceeding is perfectly harmless and almost painless, quickly done, and almost immediately recovered from. 2. It may be learned in a few minutes, and may be accomplished by the person himself without assistance. 3. No special apparatus is required. In an emergency the point of a penknife, or even a sharp pointed splinter of wood, is all that would be required. The inflating apparatus is the person's own lungs. The air could be repeatedly reinflated, and even during prolonged immersion.—*Lancet*, January 3.

SCIENCE AND THEOLOGY.—From an article by Rev. T. T. Munger, on "Immortality and Modern Thought," in *The Century* for May, we quote as follows: "When chemistry put the key of the physical universe into the hand of science, it was well enough to give up a century to the dazzling picture it revealed. A century of concentrated and universal gaze at the world out of whose dust we are made, and whose forces play in the throbs of our hearts, is not too much; but after having sat so long before the brilliant play of elemental

flames, and seen ourselves reduced to simple gas and force under laws for whose strength adamant is no measure, we have become a little restive and take up again the old questions. Science has not explained us to ourselves, nor compassed us in its retort, nor measured us in its law of continuity. You have shown me of what I am made, how put together, and linked my action to the invariable energy of the universe; now tell me what I am; explain to me consciousness, will, thought, desire, love, veneration. I confess myself to be all you say, but I know myself to be more; tell me what that more is. Science, in its early and wisely narrow sense, could not respond to these demands. But it has enlarged its vocation under two impulses. It has pushed its researches until it has reached verges beyond which it cannot go, yet sees forces and phenomena that it cannot explain nor even speak of without using the nomenclature of metaphysics. In a recent able work of science the word 'spirit' is adopted into the scientific vocabulary. Again, physical science has yielded to the necessity of allying itself with other sciences—finding itself on their borders. Chemistry led up to biology, and this in turn to psychology, and so on to sociology and history and religion, and even to metaphysics, whose tools it had used with some disdain of their source. In short, it is found that there is no such thing as a specific science, but that all sciences are parts of one universal science. The broad studies of Darwin and Herbert Spencer have done much toward establishing this conviction, which has brought about what may be called a comity of the sciences, or an era of good feeling. The chemist sits down by the metaphysician and says, tell me what you know about consciousness; and the theologian listens eagerly to the story of evolution. Unless we greatly misread the temper of recent science, it is ready to pass over certain phenomena it has discovered and questions it has raised to theology. And with more confidence we may assert that theology is parting with the conceit it had assumed as 'queen of the sciences,' and—clothing itself with its proper humility—is ready to accept a report from any who can aid it in its exalted studies.

"This comity between the sciences, or rather necessary correlation, not only leads to good feeling and mutual respect, but insures a recognition of each other's conclusions. Whatever is true in one must be true in all. Whatever is necessary to the perfection of one cannot be ruled out of another. That which is true in man's spiritual life must be true in his social life; and whatever is true in social life must not contradict anything in his physical life. We might reverse this, and say that no true physiologist will define the physical man so as to exclude the social man; nor will he so define the social and political man as to shut out the spiritual man; nor will he so define the common humanity as to exclude personality. He will leave a margin for other sciences whose claims are as valid as those of his own. If, for example, immortality is a necessary coördinate of man's moral nature, an evident part of its content, the chemist and physiologist will not set it aside because they find no report of it in their fields. If it is a part of spiritual and moral science, it cannot be rejected because it is not found in physical science. So much, at least, has been gained by the new comity in the sciences, that opinions are respected, and questions that belong to other departments are relegated to them in a scientific spirit."

EPISTAXIS.—M. Sirey controls epistaxis in typhoid fever patients by introducing into the nostril a piece of fine sponge soaked in lemon juice or vinegar and water. The patient is to be kept lying on the face until the bleeding ceases.

THE IDEAL NEUROTIC.—Why, gentlemen, my neurotic patients, if I can indicate them by a name, are almost the best people in this wicked world. Rarely endowed with the capacity and endurance, and profounder imagination, of the greatest, they form a large number of those in the second rank who are the salt of society. Let us suppose that Mr. Galton had photographed four hundred of these, inside and outside; the resulting ideal neurotic might be much as follows: His entry into your room tells of him at once. He enters with a brisk step, and a quick, observant eye. You see a slightly-built, meagre man, of sallow complexion, or, if colored, with the color painted high upon the cheek-bone; the cheeks and the temples are hollow, the temporal arteries being visible under the lean skin, which often shows tanned markings, deepened during attacks of pain; the hair is straight and fine and sparse upon the scalp; the features are sharp, often prominent, the lips thin and the skin dry; with it may be some remnants of eczema about the ears or chin. The tongue is protruded and retired quickly, and is generally narrow and pointed; it is rarely indented, and its tip, even when the health is best, does not cease to be red. There is often a slight silvery coating upon the dorsum and mid-line, the bodily frame is lightly and often finely built, the bony fingers and wrists and the visible sinews and radials betraying the absence of fat. Here and there, in later life, a knotty knuckle may tell of gouty parentage. The pulse, when most tranquil, usually ranges between seventy and eighty, and accelerates on the least excitement. The clavicles and ribs, in like manner, are prominent, and the heart's apex may be seen to beat sharply before the eye. Its systole to the ear is likewise short and sharp, and the second sound very audible over a wide area. The limbs are small, but often very sinewy. Such persons are as active as birds, and the absence of fat in their muscles often gives to these, in states of health, the quality of hardness under the hand. Their conversation, again, is lively and voluble, often keen and brilliant, but impressionable rather than imaginative. Usually such a patient does not readily come to you; he is brought, half-reluctant, by a wife or a friend. He says, apologetically, he is an old dyspeptic, and you can do him no good. He has visited all the springs and half the doctors in Europe, and he lays a bundle of old prescriptions on your desk. Once a-gate, however, his story will be a long and minute one, but never maundering, wandering, nor whining. His companions will tell you that he is subject to great fluctuations of the animal spirits—gay, even fascinating in society, brisk, orderly and thorough in business, but, at home, dejected or fretful. He is a small eater, a light sleeper, and a worn worker. These persons are the heirs of every true neurosis, from insanity to toothache; and, on the whole, when we consider the infinite perturbations of inter-marriage, it is surprising how true they run, or how clearly you may detect the neurotic strain in mixed descendants.—T. CLIFFORD ALLBUTT, *British Medical Journal*.

THE MEASUREMENT OF THE FOOT AS AN INDEX TO THE SIZE OF THE CHILD.—One main difficulty in the attainment of precision in the determination of the most suitable method of delivery in cases of dystocia, is that we have no means of exactly estimating before attempting delivery, the size of the fetal head. We can measure the pelvis, but not the head; one factor, therefore, of the mechanical problem is an undetermined quantity. A recent number of the *Zeitschrift für Geburtshilfe und Gynäkologie* contains a paper by Dr. Alfred Gonner, of Basel, in which he has made an attempt to overcome this difficulty, so far as head-last cases are concerned.

His plan is to measure the foot, and from this datum to estimate the size of the child, and, therefore, of the head. Dr. Gonner has measured and weighed one hundred children. He comes to this conclusion: that if the foot measures more than eight centimetres, nearly three and one-half inches in length, the child weighs more than 3,000 grammes, about six pounds, ten ounces. A foot more than three and one-half inches long, therefore, makes it probable that the child is above the average weight, and that there will be more than usual difficulty in the extraction of the head. If the foot be only 7.6 centimetres, about three inches long, a child of moderate dimensions may be expected; and a foot length of only 7.3 centimetres, a little more than two and three-quarter inches, would justify us in assuming that the child was premature. It is interesting to note, also, that Dr. Gonner finds that the feet of female children are smaller in proportion to the size of the body than those of males.

CHLORAL HYDRATE IN THE TREATMENT OF DIPHTHERIA, CROUP, ETC.—In the *Archives of Pediatrics*, we find a review of a book written by C. B. Galntie, M.D., which proposes the internal administration of chloral hydrate as a specific in the treatment of diphtheria and of pseudo membranous croup. The proposition is theoretically based upon the antiplastic property of the drug. Says the author (p. 113): "If an ounce of healthy human blood, as it flows from an open vein, be caught in a wine-glass or vial containing one-fourth of an ounce of a ten per-cent. solution of chloral hydrate, of the same temperature as the blood, and stirred sufficiently to intermix the two, no proper coagulation will afterward occur." Adding, "the fact is in my mind well established that it exerts a similar influence upon the living blood in the body." The author claims to have used chloral hydrate in over five hundred cases of diphtheria with a mortality of less than two per cent.; also, to have used it in eight cases of true croup, of which six recovered. In dosage, the author recommends, for adults, of chloral hydrate and of pot. chlorate, six grains each, to be given every hour until hypnotism has been produced; to children, two grains of each, given every hour, and to infants, one-quarter of a grain each of chloral and of bromide of ammonium, with two drops of chloroform to be given every hour.

A NEW HAIR DYE.—The disadvantages and positive dangers attending the use of hair dyes containing lead, have induced M. Maquet to search for a liquid which may be used for dyeing the hair and yet be innocuous. He describes, in the *Moniteur Scientifique*, a dye which is said to have progressive action, to produce all shades up to a deep chestnut color, and yet to be free from all deleterious effect. The base of the dye is bismuth. The following is the formula: Bismuth is dissolved in the smallest possible quantity of nitric acid—nearly three parts—and to this liquor a solution in water of tartaric acid, equal in weight to one-fourth of the bismuth used, is added, and then a large quantity of water, so as to insure thorough precipitation of the bismuth. The precipitate is filtered off, and washed with water until the washings have lost all acidity. The precipitate is dissolved in a solution of ammonia; and for this rather more than a fluid ounce of ammonia will be required for each ounce of bismuth used. Hyposulphite of soda—three-fourths of the weight of the bismuth employed—is then added, and when the salt is dissolved the mixture is filtered and preserved in well-closed bottles. The dye should contain about one-twentieth of its weight of bismuth. Such a mixture is said to form an admirable dye, which loses ammonia on exposure to air, and deposits sulphite of bismuth.—*British Medical Journal*.

ALCOHOLIC PARALYSIS.—Dr. Hun has collected the recorded cases on alcoholic paralysis, and from their study he holds that we are justified in regarding it as a special form of disease with the following symptoms: After a number of cerebral and gastric disturbances due to the alcoholic poisoning, the symptoms of the disease proper commence with neuralgic pains and paræsthesia in the legs, which gradually extend to the upper extremities, and which are accompanied at first by hyperæsthesia, later by anæsthesia, and in very severe cases by retardation of conduction of pain. Along with these symptoms appears a muscular weakness, which steadily increases to an extreme degree of paralysis, and is accompanied by rapid atrophy and by great sensitiveness of the muscles to pressure and passive motion. Both the sensory and motor disturbances are symmetrically distributed, and the paralysis attacks especially the extensor muscles. In addition to these motor and sensory symptoms, there is also a decided degree of ataxia. The tendon reflexes are abolished, and vaso-motor symptoms, such as oedema, congestion, etc., are usually present. Symptoms of mental disturbance are always present in the form of loss of memory and in transient delirium. The lesion is in all probability a degeneration of the peripheral nerve fibres and of the nerve cells in the cerebral cortex, together with a chronic congestion or inflammation of the pia mater. This lesion explains well the symptoms, although it is curious that alcohol should not attack the spinal cord, but only the highest and lowest part of the nervous system, if one may so call the cortex of the brain and the terminal branches of the peripheral nerves.

CHOLERA IN SPAIN.—The *Bulletin* of the National Board of Health says it is probable that the cholera epidemic has prevailed much more extensively than is indicated by the official figures, as the *Medical News*, published in Madrid, states in its issue of July 30, that in one place more than one thousand certificates of death were found that had not been reported to the registrar. The same paper also states that in the vicinity of Valencia corpses are allowed to remain in some of the houses for more than forty hours, that the clothing and bedding of those that have died of cholera, which should be burned, are sometimes not taken from the houses for eight days and sometimes not at all, and that the public vehicles of Alfafar, etc., which have their stand in the Plaza of San Augustine, carry corpses to the cemetery at a charge of \$46, and immediately upon removing the bodies load up with passengers for the return trip to the villages. The editor very properly urges the people to unite for protection against the scourge by the observance of sanitary precautions. The *Medical News*, Madrid, August 4, states that the commission recently sent into the infected districts of Spain report that in all the villages they were able to visit they found the same clinical characteristics of the disease; that in the towns supplied with water from springs or wells cholera either did not prevail at all or to a very limited extent, while the towns supplied with water from streams the disease was very destructive, the water being contaminated by the washing of the clothes of cholera-patients.

ERGOT IN CONSTIPATION.—In the *Allgem. Med. Zeitung*, Dr. Granzie reports two cases of constipation following the abuse of purgatives relieved by ergot. Three doses of ten grains each were given at intervals of two hours, and were followed by copious evacuations. A second stool occurred spontaneously the next day, and after the administration of ergot in small doses for a few days, a definite cure was obtained. The constipation was due to atony of the muscular wall of the intestines.

ACONITUM FEROX.—Dr. D. H. Cullimore, M.R.C.P., F.R.C.S. (late Senior Physician to the Northwest London Hospital; Retired Surgeon, Indian Army), recently read a valuable paper before the British Medical Association, on the therapeutic action of aconitum ferox, or Indian aconite. After describing various species of the drug, Dr. Cullimore detailed a number of cases in which he had used it with marked benefit. It reduces fever, and gives relief from pain without any after bad results. It is more diuretic and less diaphoretic than the aconitum napellus; and probably, also, because it is less diaphoretic it is less antipyretic. As an anæsthetic, or dysæsthetic, in gouty and rheumatic conditions, it is superior to the aconitum napellus, while as a vascular depressant, in small doses it is not so powerful. Dr. Cullimore gave it in a case of fatty heart and intermittent pulse during an attack of intercurrent congestion of the lung in an old subject, not only without danger, but with a highly beneficial effect. In this case it quickened the heart's action. In minute doses, it probably acts as a cardiac stimulant. In small doses it stimulates the nervous system at all parts and peripherally. In moderate doses it causes dysæsthesia, perversion of sensation, as exemplified by the tingling and numbness; while in larger doses it is anæsthetic, and a paralyzer of the nerve and other centres. Its first action on the nervous system, with its diaphoretic effect, will probably be found to explain its good effect in leprosy. Its first effect is to produce heat, followed by lowering of the temperature and cold perspiration. Its antipyretic effect is due to a lowering of the central circulation, by which it lessens the production of heat, while by its diaphoretic action it facilitates its removal. Thus its action is different from that of quinia and some other drugs, which destroy, or minimize by their antiseptic action, the conditions which lead to or tend to excite fever. When given in chronic rheumatic conditions, it may be given till tingling is produced; whereas, in acute rheumatism, its action on the heart, though useful in moderate doses in the early stages, and in small throughout, must be carefully noted later on in this disease. The cases in which Dr. Cullimore used it were of neuralgia, sick headache, rheumatism, scarlatina, asthma, and other kindred complaints. He also found it useful externally, particularly as an application for chilblains, for which it is unrivalled.

[The action of this variety of aconite is evidently similar, but less powerful, than that of aconite nap. The latter drug, in skillful hands, will probably meet all the indications claimed for the former.—Eds.]

CANCER REMOVED BY A RUBBER BAND.—Samuel Knaggs, M.R.C.S., in *British Medical Journal*, says, I will mention a simple method which I have found useful in removing cancerous masses. It is only intended for temporary relief, but it gives very little pain and produces much subsequent comfort. It consists in the application of a thin strip of india-rubber round the base of the growth. This thin rubber band having been stretched three or four times around the base, but not so tightly as to cut through, the ends are tied with silk, when at full tension, as closely as possible to the tumor, and gradual progressive contraction takes place. It checks hemorrhage, relieves pain, adds greatly to the comfort, and somewhat to the life of the sufferer. The strangulation of hemorrhoids is also, I think, more pleasantly and quickly effected with this ligature than by ordinary thick silk. It is a little more difficult to manipulate, and is most readily applied behind a strong tenaculum, which has transfixed the base of the pile. Encircling nœvoid masses with a similar temporary ligature at the base allows their being dissected out with very little loss of blood.

MISCELLANY.

—The *Ailanthus glandulosa* is causing the death of poultry in France.

—Biniodide of mercury in the forty thousandth dilution is the latest antiseptic.

—The Philadelphia medical colleges have discontinued their post-graduate courses.

—One part of chloroform in fifty of water is said to have an admirable effect in the arrest of hemorrhage.

—Experience shows that cocaine chloride will not cure all cases of morphinism, etc., as claimed by Dr. Fleischl.

—Dr. Black (*Lancet*) reports a case of violent hysteria, with a quick and feeble pulse, cured by tincture of digitalis.

—Chloral and camphor combined, in equal parts, forms a clear liquid and is an excellent application in cases of neuralgia.

—It is proposed to use an elastic air cushion as a sound-deadener in the case of boiler-makers, who so often suffer from impaired hearing power.

—Dr. Hibbard says a ten per cent. ointment of the oleate of morphine applied to a carbuncle once in three hours, shrinks the tumor and gives marked relief.

—A test for lead poisoning is said to consist in painting the skin with monosulphide of sodium or sulphide of ammonium, which will give a well-marked plumbic reaction.

—It is said that nitrate of mercury ointment should not be made with any of the products of petroleum, on account of the chemical change which takes place in the mixture.

—M. Straus finds the number of tuberculosis cases does not reach one in 100,000, so that vaccine obtained from this source, properly prepared, may be considered as absolutely pure.

—Dr. Darling (*Therap. Gaz.*) finds half drachm doses of muriate of ammonium the best remedy in neuralgia and in toothache, a single dose of half a drachm being often sufficient.

—Dr. Harkin reports relief of vomiting and purging from painting for a few inches over the course of the vagus, commencing behind the angle of the jaw, with cantharidal collodion.

—In several cases of biliary colic due to impacted gall-stones the washing out daily of the stomach by Küssmaul's method resulted, on the fourteenth day, in the passage of the gall stones.

—The *North Carolina Medical Journal* speaks in high terms of oranges as a galactagogue. If at any time the flow of milk be not free, one or two oranges will increase it very abundantly in an hour or two.

—Prof. Da Costa recommends, in phthisical and other night sweats, ergotine, two grains three times a day. It has all the beneficial action of atropine, without the unpleasant dryness of the mouth and fauces.

—Diagnosis of gonorrhœa in the female can easily be made, according to Martineau, of Paris, by noting the character of the discharge, which is always acid in the specific form of the disease and alkaline in simple vaginitis.

—Dr. John L. Moffat, late Secretary of the Homœopathic State Medical Society, has started on a trip round the world, by the way of California and Japan. Dr. H. M. Dayfoot, of Rochester, succeeds him as Secretary.

—The semi-annual meeting of the Homœopathic Medical Society, of the State of New York, will be held at Grove Springs, Lake Keuka, Steuben Co., Sept. 8 and 9. Particulars may be obtained of Dr. H. M. Dayfoot, Secretary, Rochester, New York.

—The latest therapeutic measure we have seen recorded for rheumatism is the proposition to allow the affected part to be stung by bees, three being employed in the case reported! Why is it not just as well to obtain the virus and inject hypodermically?

—Haarlem oil is reported to have caused a number of deaths recently. This preparation is a mixture of sulphur boiled with rapeseed and oil of turpentine, and it is the effect of the latter agent upon the kidneys which is charged with the toxic effect.

—The fearful epidemic of small-pox which has recently prevailed in Montreal, causing thus far about 150 deaths, might have been prevented by enforced vaccination. This is the reason of the freedom of New York from the scourge. Vaccination in all the public schools is enforced by law.

—Dr. Marc Sée says of the treatment of sprains by the elastic bandage that it fulfils two indications. (1.) The rapid absorption of extravasated blood around the joint, and (2) it favors cicatrization of torn ligaments and ruptured parts by complete immobilization.

—The last returns of the National Board of Health, show no cases of yellow fever in this country, but four deaths in St. Thomas and three in Havana. Small-pox is reported in nearly all the European cities, owing to a neglect of proper vaccination. They have been 200,000 cases of cholera in Spain and 70,000 deaths, but the history of past epidemics of cholera show that they have lasted in the East four or five years before they have reached this country. The United States will probably escape this year both cholera and yellow fever.

—Dr. Harry K. Leonard, of Plymouth, Pa., gives in the *U. S. Medical Investigator* some very interesting statements in reference to the epidemic which was recently so widespread and fatal in that place. He says, from the report of the chairman of the relief committee, there was in round numbers 900 cases of fever and 124 deaths. Of these 85 was treated by the new school with four deaths, and 815 by the old school with 120 deaths.

—Dr. Vetroff painted with iodine the lumbar region of a patient in the prodromal stage of small-pox. The next day the part painted was found covered all over with variolous rash, while the rest of the body presented only two vesicles. Dr. Bojinski-Bojko also tried iodine painting in several cases in the prodromal stage, applying the iodine to the anterior surface of the thighs. In all the cases so treated the rash was limited to the regions painted, and the course of the disease was extremely favorable.—*Medical Brief*.

—We are creditably informed that the sales of the Clysmic waters during the past summer have been enormous, and that for the table, independent of its medicinal qualities, it is rapidly supplanting imported waters, which have heretofore had a large sale. It is finding its way to the tables of thousands of our best people who, in time, look upon it as more of a necessity than a luxury. With lemon juice, with light wines and alone as a beverage, it has, in our estimation, for we have tried all the aeriated waters, no equal, while in the sick room it is a luxury which those scorched with fever can fully appreciate.